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ABSTRACT

The report was aimed at determining (1) the degree to which recommendations made at three statewide articulation institutes for administrators and vocational teachers from the Department of Education (D.O.E.) and the community colleges have been implemented, and (2) the relative effectiveness of those recommendations in relation to the current status of vertical and horizontal articulation between and among the secondary and vocational programs in Hawaii. Data were collected from a 12-section questionnaire sent to 164 institute participants and from interviews with those playing key leadership roles at the institutes. Information derived from the personal interviews, results of responses to the questionnaire, and treatment of the questionnaire data (item and section analyses) are presented. An annotated list of tables provides orientation to the tables which contain the data in their entirety. A summary analysis is given along with a prioritized list of six recommendations. The study suggests that considerable articulation exists within and between the two systems and that effective measures which will facilitate articulation are currently being pursued by teachers and administrators. Appended are the articulation questionnaire and a variety of reports and institutional correspondence dealing with program articulation. (Author/MS)

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ARTICULATION OF SECONDARY AND POST-SECONDARY VOCATIONAL PROGRAMS IN HAWAII:

Follow Up Study II

Office of the State Director for
Vocational Education
EPDA Part F (553) Project
1776 University Avenue
Wist 216
Honolulu, Hawaii 96822

April, 1976

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Follow Up Study II

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Office of Education
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Improvement of Educational Systems
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Preface

The data for this second follow-up study was compiled during October and November of 1975. The report itself was written in December, and the summary produced during January, 1976. Some of the data, especially pertinent to either the D.O.E. or the community college system, were distributed to the district superintendents and the provosts to give them an opportunity for summary observations they might deem valuable. Their responses may create the necessity to provide an addendum to this study, but such an addendum should not radically alter its substance or conclusions.

Like the blind men and the elephant, we all tend to define a problem on the basis of the approach taken. This psychology seems applicable to the problem of articulation: teachers, high school and community college administrators, as well as staff administrators view articulation in the light of their experience and difficulties with the problem. A major goal of this study has been to bring these sometimes disparate views into a focus which emphasizes the common basis for action and benefit. With these common factors established, coordinated efforts, understanding, and results should more readily be attained.

As always in a study of this scope, the evaluator finds himself deeply in debt to the "cast of thousands" which makes such a project possible. Without the cooperation of the teachers and administrators who so generously gave their time for the questionnaires and interviews, there would have been no data for the study. Without the guidance of the Executive Committee of the E.P.D.A. project*, there would have been no direction for the study. Without the good humor, patience, and hours of tedious typing by Dorothy Igawa, Susan Takasawa, and Gladys Lee the study would never have achieved its printed form. And finally, without the many ideas offered by Dr. Minnie Boggs during the accumulation of the data and her editorial suggestions for the presentation of that data, much of whatever clarity, cogency, and comprehensiveness the study may lay claim to would never have been realized.

*Samson S. Shigetomi, State Director for Vocational Education
George Ikeda, Executive Secretary, Commission on Manpower and Full Employment
Lawrence Inaba, Administrator, Department of Education, Vocational-Technical Section
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John Schlieman
April, 1976

Table of Contents

	Page
List of Tables	iii
List of Appendices	iv
Glossary	v
Summary	vi - xxv
The Recommendations	xvix - xxv
Chapter I - The Background	2 - 10
Chapter II - The Study	11 - 39
A. The Articulation Questionnaire	12
B. Results	16 - 39
Item Analysis	16
Section Analysis	30
Personal Interviews	37
Chapter III - Observations and Recommendations	40 - 46
Tables	47 - 67
Appendices	68 -101

List of Tables

Table 1. Distribution and Return of Articulation Questionnaires

Table 2. Totals: Distribution and Return of Articulation Questionnaires by System and by Articulation Institute

Table 3. Analysis of Number of Responses by Section and System (Sections I-XI)

Table 4. Item Analysis of Questionnaire Sections I-XI (Means and Standard Deviations of Response Totals (N) by Item and by System)

Table 5. Range of Means and Standard Deviations of Responses: Upper and Lower Limits (By Item and by System: Cf. Table 4) [Presented as part of text]

Table 6. Range of Mean and Standard Deviation Responses: Upper and Lower Limits (By Item and by System: Cf. Table 4) [Table 6 duplicates Table 5 but eliminates textual interruptions]

Table 7. Mean of Means and Mean of Standard Deviations of Items (Table 4): By System and by Section

Table 8. Mean of Means and their Standard Deviation by Subject Area, by Section, and by System [Table 8 presents the Community College scores first and then the D.O.E. scores immediately below. D.O.E. scores also coincide with ditto marks to permit easier scanning]

Table 9. Ranked Averages of Means and their Standard Deviations from Table 8. [This composite figure represents the Mean score for the eleven objective Sections of the Questionnaire reported by Subject Area, System, and by Institute]

Table 10. Frequency of Reference in Section XII (essay-type responses) to Articulation Variables

List of Appendices

A. Articulation Questionnaire

B. April 17, 1974, "Report of the Regents' Committee on Vocational Education and Community College Policies"

C1. March 14, 1975--"Report: Articulation Guidelines and Responsibilities Delineated by Provosts"

C2. March 14, 1975 report on "Administrators' Meeting on Articulation Report--Department of Education Session"

D. "Training Workshop, December 19-20, 1975" Office of the State Director for Vocational Education: Special Federal Programs Project

E. September 2, 1975 memo to District Superintendents, Secondary School Principals, and Business Education Teachers from Albert H. Miyasato, Deputy Superintendent of Education, regarding "Certificate for Achievement of Minimum Criteria in Secondary Vocational Education Programs"

F. House Resolution 90: House of Representatives Eighth Legislature, 1975, State of Hawaii

G. November 26, 1975 "Correction to Special Announcement"

H. October 3, 1975 memo "TO ALL CONSTRUCTION TEACHERS" from Lawrence A. Inaba, Program Specialist, Industrial Technical Education

I. November 20, 1975 "Carpentry Advisory Committee Meeting Agenda"

J. September 15, 1975 memo to Earl Ramsey, CADC, from Ron Palma, Chairman, Business Education Division, Leeward Community College regarding "Course Equivalencies and Changes in Title/Descriptions"

K. August 4, 1975 memo to Mrs. Dorothy Kohashi from Minoru Shimokawa regarding "Implementation of Articulation Recommendations"

L. February 26, 1975 memo to George Seriguchi from Student Services regarding "Discussion to implement agreements with Maui County High Schools in the Auto Mechanics Program in granting credits for equivalent courses taken in high school"

M. Undated report: "Joint Activities Between the Department of Education and Kauai Community College"

Glossary of Terms

Questionnaire	The measuring instrument reproduced in Appendix A. It consists of eleven objective parts (called Sections), and one open-ended, essay-type part (Section XII).
Section	A number of Items grouped together by similar content concern.
Item	A single content variable eliciting a single Response.
Response	A single evaluation reaction to an Item.
Respondent	The participant making the Response.
System	Nomenclature identifying the two educational program level populations of the study; i.e. Department of Education (D.O.E.) and Community College (C.C.).
Participants	Teachers from the D.O.E. and the Community Colleges who attended one or more of the three Articulation Institutes.
Mean	A statistical measurement of central tendency which is the same as the arithmetic average.
Mean of Means	The arithmetic average of several sample Means.
Standard Deviation	A statistical measurement indicating a theoretical distribution (dispersion) of scores around a Mean or other statistical point. Plus and minus one SD from the mean, theoretically accounting for approximately the middle 68% of the area of distribution. Consequently, the size of the SD reflects the "spread" of the scores around the Mean. The SD formula used for this study was: $$S.D. = \sqrt{\frac{N(\Sigma X^2) - (\Sigma X^2)}{N(N-1)}}$$

SUMMARY

This study proposes to:

1. Bring together in a single study a brief historical overview of the efforts made to resolve the problems of articulation as well as present pertinent references to selected documents from the body of literature which has emerged from those efforts.

2. Describe the mechanics and results of this present study.

3. Provide observations and recommendations from the information compiled and reviewed.

A summary of these three dimensions of the study is presented below.

I. The Background

Beginning in the fall of 1972, the Office of the State Director for Vocational Education of Hawaii initiated a project aimed at improving vertical and horizontal articulation between and among the secondary vocational programs of the Department of Education and the vocational programs of the community colleges. Central to the organization of the project were three state-wide articulation institutes to which administrators and vocational teachers from the D.O.E. and the community colleges were invited as participants. Each of these institutes generated a report[1] detailing

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[1] Collaborative Roles and Functions of Occupational Education Programs, October 1972-June 1973, Honolulu, Hawaii. Edited by: Lawrence F. H. Zane, University of Hawaii, College of Education, Department of Curriculum & Instruction, 1776 University Avenue, Honolulu, Hawaii 96822.

Collaborative Roles and Functions of Occupational Education Programs, October 1973-June 1974, Honolulu, Hawaii. Edited by: John H. Baker and Lawrence F. H. Zane, University of Hawaii, College of Education, Department of Curriculum & Instruction, 1776 University Avenue, Honolulu, Hawaii 96822.

Articulation of Secondary and Post-Secondary Vocational Education Programs, A Report from the Third Institute; Agriculture; Auto Body Repair & Painting, Carpentry, Distributive Education. Edited by: Dr. Minnie Boggs, Project Director, George Lee, Project Coordinator, Office of the State Director for Vocational Education, Wist 209-C, 1776 University Avenue, Honolulu, Hawaii 96822, May 1975.

the results of the meetings and the recommendations proposed by the participants. In addition, a follow-up study[2] was made in 1974-75 to determine the extent to which the recommendations of the first institute (1972-73) had been implemented. That study also carried its own recommendations for facilitating the implementation of the articulation process.

II. The Present Study

The Design. This report is aimed at determining (1) the degree to which recommendations made at the three Articulation Institutes have been implemented, and (2) the relative effectiveness of those recommendations as they relate to the current operative status of vertical and horizontal articulation. Originally intended to focus on the second institute (1973-74) only, the investigation was expanded to acquire as much information as possible on the current status of secondary and post-secondary (two-year institutions) articulation in order to expedite the progression of the total articulation effort.

Given the extensive range over time, programs, and personnel that this second follow-up study confronted, its design came to rest heavily on a questionnaire (APPENDIX A) composed of twelve separate sections which was sent out to 164 participants of the three institutes. In addition, participants from the community colleges and the D.O.E. who played key roles as team leaders or assistant team leaders within their vocational-technical areas at the Institutes were interviewed at their institutions or by telephone, individually or in groups, according to the year(s) of their attendance. Arrangements were also made through the D.O.E. to meet with its program specialists as well as its district superintendents and secondary curriculum specialists throughout the state. Similarly, interviews were arranged with administrative officers (provosts, deans, registrars, department chairmen) from all of the community colleges.

A limitation of this study is that it did not include an assessment of student opinion concerning horizontal and vertical articulation, and whether students' educational needs were furthered or hindered by the extent to which programs are articulated. That there are no students being denied optimum progress through their academic progress seems unlikely. A recent report[3] indicated that of the total 2,403 transfer

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[2]Final Report, Project No. V0274VZ, Grant No. OEG-0-74-1649, Articulation Among and Between Public Secondary and Post-Secondary Institutions in Hawaii. A Follow-Up Study of the Implementation of the FY 1973 Articulation Recommendations. Research Project in Vocational Education conducted under Part C of Public Law 90-576. Minnie E. Boggs, Ph.D., Office of the State Director for Vocational Education, Special Federal Programs Project, 1776 University Avenue, Wist Hall 209-C, Honolulu, Hawaii 96822, May 1975.

[3]University of Hawaii; Office of the Chancellor for Community Colleges, Institutional Research Unit. CC-IRP 83, p. 7.

students with which the University of Hawaii System contended last fall, 1,431 were transfers from within the University system and 920 (38%) of these were in vocational programs involving transfers with community colleges. Within such a large sample, there is likelihood that some credits were unnecessarily lost or courses unnecessarily duplicated in the transfer process; nevertheless, there was no indication from either population surveyed (administrators or participants) that students had lost credits. A standard question presented to all groups interviewed was, "Is the evaluation of transfer credits for students a big problem at the beginning of a semester?" No one who might be involved with the mechanics of transfer of credits--e.g., the registrar, dean of instruction --or who might be exposed to the students' complaints about being unfairly treated--e.g., the dean of students, counselors or teachers--said that it was a significant problem.

The questionnaire itself was constructed by examining the recommendations presented in each of the three reports from the Articulation Institutes. As the "Instructions" of the questionnaire explain,

> The questionnaire ranks the recommendations in terms of frequency of mention by all subject areas. This rank ordering may indicate the relative importance of the recommendations to Institute participants. For example, Section I (Standardization) was the most frequently cited articulation recommendation by all subject areas; followed by Section II (Dissemination of Information), etc.[4]

Consequently the questionnaire is not only an instrument which seeks information from the participants but one which provides information for them as well. For example, in the mechanics of its construction as here noted, it provides a rank ordering of the articulation problem areas according to the frequency with which those areas were mentioned by the participants from each of the three years.

Although this information in itself suggests sensitive areas, the required scope of the questionnaire (covering three institutes and twelve major areas of vocational instruction) deprived it of focus and precision. Even though this limitation in design was anticipated in the "Instructions,"[5] responses made on the questionnaire and during interviews indicated that

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[4]Source: Articulation Questionnaire Instructions.

[5]Source: Articulation Questionnaire Instructions; paragraph 2. "As an institute participant, please answer the questions in terms of the subject area in which you participated. Since the questionnaire covers all twelve articulated areas, some items may not be relevant to your area. However, answer as many as are appropriate to <u>your subject area</u>. If you participated in more than one subject area, please fill out separate questionnaires, one for each area."

many participants felt frustrated and occasionally even anxious about their inability to "answer all the questions." Whether this anxiety over an absence of "examination" closure is a product of the instrument or a personality variable of the profession sampled (or a combination of both) is open to question. The fact is that the extensive range of the questionnaire's target made it difficult to serve the needs of all the respondents.

In contrast to the first eleven objective sections of the questionnaire (which requires participants to evaluate sectional variables using a rating scale of 1-4), the final section of the questionnaire was an open-ended, essay-type question included to provide greater development, latitude, and flexibility of responses for the participants. Additional flexibility of response in the research design was provided through the inclusion of the personal interviews. Like the questionnaire, the interviews served not only as a method for the acquisition of information but also for the transmission of information as well. There was no group of institute participants that was not ready for animated discussion of its views and its evaluation of the institutes or of the present state of articulation. Causes for animation as well as the evaluations of the current state of articulation varied considerably, but the vigor of the responses was a relatively constant factor. Both groups, i.e., the participants and the administrators, were thoroughly cooperative, candid, and generous with their time and suggestions. Their professional attitudes contributed heavily to whatever value this study may prove to have, for without their readiness to discuss a common problem with such frankness, the attitudinal stance assumed by professionals towards articulation (and so key to its implementation) would never have been revealed.

The Results. Information derived from the personal interviews, results of the participants' responses to the questionnaire, and treatment of questionnaire data is presented in Chapter II. In addition, an "Annotated List of Tables" provides orientation to the tables, while the tables themselves present the data in their entirety. The following is a summary analysis of the questionnaire data and focuses on salient details of tables.

1. Analysis of Table 4: The mean scores for the evaluation of the 86 objective items (dealing with various aspects of articulation) on the questionnaire were consistently higher for D.O.E. participants than for community college respondents. D.O.E. means were higher on 64 of the 86 items; community college means were higher on 21 items; the mean score for one item was equal. D.O.E. means were also higher for all sections of the questionnaire except for advisory committees (XI) and program development (VII).

Chart A on the next page shows the distribution of higher means by questionnaire item and section for the two educational systems:

CHART A (Data from Table 4) Distribution of Higher Mean Scores by Item, Section, & System			
QUESTIONNAIRE SECTION	TOTAL NO. OF ITEMS	HIGHER MEANS PER ITEM	
		D.O.E.	C.C.
I.* HORIZONTAL STANDARDIZATION	16	10	5
IA. VERTICAL STANDARDIZATION	16	16	0
II. DISSEMINATION OF INFORMATION	5	4	1
III. IN-SERVICE TRAINING	7	5	2
IV. VOCATIONAL GUIDANCE	8	6	2
V. RESOURCES	5	4	1
VI. ADVANCED PLACEMENT	5	4	1
VII. PROGRAM DEVELOPMENT	5	2	3
VIII. STATE-WIDE COMMITTEES	5	5	0
IX. TEACHER INPUT	3	2	1
X. STUDENT OPTIONS	7	6	1
XI. ADVISORY COMMITTEES	4	0	4
TOTAL	86	64	21

*Equal means were scored on one item of Section I.

2. Table 4 provides a basis not only for determining the distribution of mean scores by relative size but by actual size as well. For example, Chart B on the next page, derived from Table 4, indicates the number of items by section and by system that received a rating of less than 2.00. This value was selected as a point of differentiation both because it is the mid-point on the rating scale and because values <u>above</u> 2.00 move in the direction of what the rating scale has labeled "Good, a definite gain, a sizeable improvement," while those values <u>below</u> 2.00 indicate a less positive assessment.

CHART B
(Data from Table 4)
Number of Items with Mean Scores Below 2.00
(By Section & By Educational System)

SECTION	NO. OF ITEMS IN SECTION	C.C.: NO. OF ITEMS BELOW 2.00	D.O.E.: NO. OF ITEMS BELOW 2.00
I. Horizontal Standardization	16	3	1
IA. Vertical Standardization	16	12	1
II. Dissemination of Information	5	3	1
III. In-Service Training	7	4	2
IV. Vocational Guidance	8	2	1
V. Resources	5	3	2
VI. Advanced Placement	5	4	4
VII. Program Development	5	0	1
VIII. State-Wide Committees	5	4	2
IX. Teacher Input	3	1	0
X. Student Options	7	1	0
XI. Advisory Committees	4	0	0
TOTALS	86	37	15

Chart B not only shows the number of items rated below 2.00 but it also provides a means of comparing which sections had the larger numbers of sub-two ratings by community college and D.O.E.

respondents. There were, for example, more sub-two ratings by both groups for "Advanced Placement" (Section VI) than for any other section. Both systems also rated "State-Wide Committees" (Section VIII), "In-Service Training" (Section III), and "Resources" (Section V) with a comparatively greater number of sub-two ratings. The community college respondent group had a far greater total number of sub-two item ratings than did the D.O.E. group. In Section IA (Vertical Standardization), community college respondents register almost one-third of their total sub-two evaluations in contrast to one sub-two rating by the D.O.E. group.

3. Analysis of Table 5: Table 5 derives directly from Table 4 in grouping the items in each questionnaire section rated highest (Upper Limits) and lowest (Lower Limits) by each group. Table 5 is considered more amply in Chapter II and should be examined there. Its format (data per section and commentary per section) lends itself to rapid review. What emerges as critical factors, however, are

a. Higher scores for horizontal standardization than vertical standardization (Sections I and IA).

b. Higher scores for conceptual aspects of standardization (objectives, content, philosophy) than mechanical aspects (numbering, total contact hours per course, scheduling) (Sections I and IA).

c. Higher scores for the dissemination of information between and among secondary schools and community colleges than other agencies or institutions (Section II).

d. Higher scores for in-service training programs utilizing D.O.E. or community college personnel than any other source (Section III).

e. Higher scores for career guidance and early admissions to community colleges than advanced placement exams (Section IV).

f. Higher scores for utilization of resources from business and industry than unions or governments (Section V).

g. Lower scores for almost all aspects of advanced placement and especially the utilization of oral or written exams (Section VI).

h. Higher scores for almost all aspects of program development as they relate to diversity of student talent, program implementation, or equipment (Section VII).

i. Lower scores--especially by the community college respondents-for almost all aspects of state-wide articulation committees as they contribute to program evaluation or review or the dissemination of information (Section VIII).

j. Higher scores on almost all aspects of teacher input, e.g., development of course criteria, curriculum guides, and articulation (Section IX).

k. Higher scores on almost all aspects of student options (typing and shorthand certification, early job entry, or early admission to community colleges) except for entry to advanced level courses by community college respondents (Section X).

l. Some of the highest scores on all aspects of advisory committees, especially in their provision of information about industry changes and development, professional stimulation, and guidance in developing or modifying programs (Section XI).

m. Section XII required a written response. While the responses ranged widely from the pertinent to the impertinent, most of them reinforced aspects of the objective data, primarily

1) need for transmission of information (especially follow-up and feed-back on the progress of articulation);

2) resources (especially concerning the shortage of time to pursue professional goals, e.g., participation in advisory committees); and

3) need to designate an agent that would be responsible for the ongoing direction, supervision, and coordination of the articulation process. Arguments for the necessity of such an agent created a re-occurring theme during the course of the personal interviews as well.

4. Analysis of Table 8: Chart C on the next page provides a summary of the data of Table 8 (sectional analysis by Vocational Areas). Since dividing the participants into their respective vocational areas considerably reduces the number of respondents to each section of the questionnaire, the validity and reliability of the data are decreased. Nonetheless, by utilizing the same technique employed in Chart B (i.e., determining the cumulative means that fall below a 2.00 level for each vocational area and for each section) the extreme scores which emerge may suggest subject areas rated by participants as more or less successful in the process of articulation.

CHART C
(Data from Table 8)
CUMULATIVE SECTIONAL MEANS BELOW 2.00: D.O.E.
By Vocational Area, Institute, and Questionnaire Section

ARTICULATION INSTITUTE I	HORIZONTAL STANDARD-IZATION	VERTICAL STANDARD-IZATION	DISSEMINA-TION OF INFORMATION	IN-SERVICE TRAINING	VOCATIONAL GUIDANCE	RE-SOURCES	ADVANCED PLACEMENT	PROGRAM DEVELOP-MENT	STATE-WIDE COM-MITTEES	TEACHER INPUT	STUDENT OPTIONS	ADVISORY COMMITTEES	TOTAL NO. OF SECTIONS WITH SUB 2 MEANS
Business Education (Typing/Shorthand) (n=2)	2.83	3.00	2.67	2.83	2.25	2.00	3.00	2.20	1.40	2.16	2.67	NR	1
Auto Mechanics (n=3)	2.27	1.78	2.14	3.00	1.92	1.71	1.40	1.67	1.20	1.00	1.92	2.37	7
Drafting (n=3)	2.95	1.88	2.00	1.94	1.75	2.00	1.00	1.83	1.00	2.00	2.43	3.40	6
Food Service (n=2)	2.94	2.23	2.00	1.21	1.88	1.83	2.10	1.00	1.00	2.20	1.25	1.75	7
Sub Totals (n=10)	0	2	0	2	3	2	1	3	4	1	2	1	21
ARTICULATION INSTITUTE II													
Business Education (Data Processing & Accounting) (n=9)	2.41	2.09	1.73	1.72	2.22	2.03	1.67	2.03	2.25	1.75	2.36	1.65	5
Electricity (n=1)	2.94	2.88	2.50	1.33	2.00	2.00	NR	1.60	1.40	1.33	NR	1.00	5
Electronics (n=4)	2.24	2.31	2.07	2.07	2.24	2.15	2.00	2.35	2.40	2.08	2.83	3.00	0
Health Occupations (n=2)	2.69	2.68	2.56	2.45	2.44	2.37	1.80	3.00	3.10	3.00	2.56	3.40	1
Sub Totals (n=16)	0	0	1	2	0	0	2	1	1	2	0	2	11
ARTICULATION INSTITUTE III													
Carpentry (n=5)	2.64	2.14	2.30	2.13	2.23	2.28	1.50	2.08	1.73	2.00	2.39	1.87	3
Agriculture (n=6)	2.36	1.86	2.37	1.44	2.43	2.45	NR	2.63	2.20	3.00	2.30	3.14	2
Automotive Body Repair and Painting (n=3)	2.10	2.10	3.09	3.10	2.42	2.07	2.90	1.87	2.00	3.00	2.32	2.83	1
Distributive Education (n=6)	2.52	2.31	1.64	2.35	2.46	2.08	2.13	1.91	2.16	2.73	2.27	1.92	3
Sub Totals (n=20)	0	1	1	1	0	0	1	2	1	0	0	2	9
GRAND TOTALS (n=36)	0	3	2	5	3	2	4	6	6	3	2	5	41

n=number of respondents

CHART I
(Data from Table 8)
CUMULATIVE SECTIONAL MEANS BELOW 2.00: COMMUNITY COLLEGE
By Vocational Area, Institute, and Questionnaire Section

ARTICULATION INSTITUTE I	HORIZONTAL STANDARD-IZATION	VERTICAL STANDARD-IZATION	DISSEMINA-TION OF INFORMATION	IN-SERVICE TRAINING	VOCATIONAL GUIDANCE	RE-SOURCES	ADVANCED PLACEMENT	PROGRAM DEVELOP-MENT	STATE-WIDE COM-MITTEES	TEACHER INPUT	STUDENT OPTIONS	ADVISORY COMMITTEES	TOTAL NO. OF SECTIONS WIT SUB 2 MEANS
Business Education (Typing/Shorthand) (n=2)	1.19	1.23	1.14	1.69	1.75	2.11	2.20	2.20	1.10	2.20	1.58	1.88	8
Auto Mechanics (n=7)	2.62	2.18	2.00	2.49	2.48	2.39	2.07	2.57	1.86	2.31	1.97	2.61	2
Drafting (n=4)	1.97	1.66	1.56	1.96	2.50	1.85	2.00	2.30	1.60	2.11	2.65	2.94	6
Food Service (n=1)	2.19	1.60	3.25	2.71	2.33	4.00	1.00	1.00	1.00	3.00	2.00	4.00	4
Sub Totals (n=14)	2	3	2	2	1	1	1	1	4	0	2	1	20
ARTICULATION INSTITUTE II													
Business Education (Data Processing & Accounting) (n=11)	1.83	1.67	1.50	1.41	2.11	1.88	1.71	1.96	1.27	1.90	2.61	2.69	9
Electricity (n=1)	1.44	1.38	1.00	1.00	NR	1.00	1.00	1.40	1.00	2.00	1.17	1.00	10
Electronics (n=0)	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Health Occupations (n=3)	2.50	1.05	2.08	1.89	1.50	1.53	1.00	1.89	1.80	1.40	1.20	2.33	9
Sub Totals (n=15)	2	3	2	3	1	3	3	3	3	2	2	1	28
ARTICULATION INSTITUTE III													
Carpentry (n=8)	2.55	2.04	2.17	2.06	2.16	2.53	2.56	2.53	2.25	2.15	2.16	2.72	0
Agriculture (n=1)	NR	2.00	2.00	1.00	1.00	1.00	1.00	1.60	NR	2.50	1.00	2.75	6
Automotive Body Repair and Painting (n=5)	2.73	3.19	3.75	2.78	2.78	3.23	2.40	2.31	2.00	2.67	2.67	3.60	0
Distributive Education (n=2)	2.56	1.00	1.56	1.57	1.57	1.50	1.50	1.20	1.30	1.60	1.83	2.63	10
Sub Totals (n=16)	0	1	1	2	2	2	2	2	1	1	2	0	16
GRAND TOTALS (n=45)	4	7	5	7	4	6	6	6	8	3	6	2	64

n=number of respondents

a. Community college respondents (n=45) registered a total of 64 sectional means that fell below the level of 2.00. D.O.E. respondents (n=36) registered 41.

b. Ratings of community college respondents from typing and shorthand, data processing and accounting, health occupations, and distributive education accounted for 56% of the sub-two means. Drafting and electricity and agriculture (each of the latter two with one respondent only) accounted for an additional 34%. Respondent ratings from these seven community college areas accounted for 91% of the community college sub-two scores.

c. D.O.E. respondents from drafting, auto mechanics, and food service accounted for almost 50% of D.O.E. sub-two scores. They were the only subject areas whose scores fell below the 2.00 level for one-half or more of the sections.

d. The largest number and proportion of sub-two scores for the community college respondents were registered by the participants of the Second Articulation Institute; the smallest by those attending the Third Institute. Two community college vocational areas from the Third Institute (carpentry and auto body repair and painting) had no scores below the 2.00 level.

e. The largest number and proportion of sub-two scores from the D.O.E. respondents were registered by the participants of the first Institute and the smallest from the third. D.O.E. electronics respondents had no sub-two scores, health occupations, auto body repair and painting, and typing and shorthand, one, agriculture, two.

f. Chart C (Sub-Totals) also shows the number of sub-two scores recorded in each questionnaire section. High frequency of responses below the 2.00 level were recorded by both systems on state-wide committees (Section VIII), program development (Section VII), in-service training (Section III), and advanced placement (Section VI).

g. Community college participants (n=57) recorded more sub-two scores than D.O.E. participants (n=49) in all sections except advisory committees (Section XI). An equal number of sectional means below the level of 2.00 were recorded for both D.O.E. and community college groups on teacher input (Section IX) and program development (Section VII).

5. The Personal Interviews

a. The D.O.E. administrators expressed confidence in the current state of articulation. Problems with horizontal articulation are negligible in the D.O.E., occurring mainly when a program at one high school is not offered at a commensurate level at another. They felt that vertical articulation with the community colleges was functioning well at the present time and expressed optimism about the future development of vertical articulation and more collaboration. It is felt the D.O.E.'s continued thrust towards greater utilization of performance objectives to define course criteria will facilitate the articulation process.

b. Although community college administrators did not express the same level of satisfaction with articulation as did D.O.E. administrators, they believe that in practically all cases the students are being offered extensive opportunities to pursue their educational and vocational goals as expeditiously as the academic programs permit. In spite of the absence of a complete standardization of course offerings, content, numeration, or sequence, the highly personal attention given to the evaluation of course work submitted for credit by transfer students has apparently resulted in satisfactory articulation.

c. Neither the D.O.E. nor community college participants expressed the same confidence as their administrators concerning the progress of articulation. Dissatisfaction was expressed over the failure to implement their recommendations or provide feed-back on actions being taken, and direction of articulation. This dissatisfaction seemed to be directed more towards the absence of informational feed-back and administrative support than with actual articulation problems. Two such problems, however, were specified. One dealt with the student who finds his academic skills deficient upon entering a community college. For example, a student who is able to enroll in an advanced electronics course may find that the course calls for math skills which he may not have. His progression through the program is therefore delayed while the math course is taken. The other problem dealt with the superior student who finds a given community college course duplicates knowledge or skills which he has already mastered.

Both D.O.E. and community college participants stressed the values they had derived from the opportunity to know each other as individuals and as professionals. They indicated that the ability to contact their colleagues directly about course problems or developments provided a basis for understanding, for student preparation and, so, for this kind of articulation which had never existed before. Many cited this as the most important accomplishment derived from their attendance at the Articulation Institutes.

In addition, many participants at both levels either through meetings independently organized, through their professional organizations (e.g., the Hawaiian Business Educators Association) or through their professional contact (e.g., the apprentice programs) had been able to pursue personally many of their institute recommendations.

III. Observations and Recommendations

Observations. The various reports and studies on the status of vertical and horizontal articulation between and among the vocational programs of the Department of Education and the community colleges as well as earlier recommendations are sufficiently extensive in scope and similar in conclusions to provide a fund of information from which the leaders of vocational education in Hawaii may chart their future course of action. This present study tends to corroborate and support these earlier findings. Furthermore, this study suggests not only that considerable articulation already exists within and between the two systems but also that effective measures which will facilitate and expedite the machinery of articulation are currently being pursued by teachers and administrators alike.

However, the goals of improving the articulation process might be more readily attained through a more organized approach to the solution of the persisting problems. Central to such an approach is deciding whether the commitment to and implementation of more coordinated efforts is worth the time, energy, and cost to translate the process into more efficient form. Until that decision is agreed upon at administrative levels capable of ensuring supervised implementation of recommendations found in this and other reports, the future progress of articulation will lack the direction it needs.

Documents such as the three Articulation Institute reports, Boggs' follow-up study, and the State Master Plan for Vocational Education (Revised 1974) provide concrete recommendations which--when implemented--will do much to remove remaining obstacles to a more efficient and productive articulation process. The recommendations for improved articulation exist. What has been lacking and must be supplied is a coordinated and supervised program to implement the recommendations and convert proposed policy statements into applied policy and action. If there is one clear recommendation that emerges from this study, it is

> DECIDE what level of priority further attempts to facilitate the articulation process warrant; what policy and program are necessary to meet that priority; and then ACTIVATE that policy and program with the administrative commitment, support, and resources to realize them.

What appears uncertain in the decision making process is just how much of the system should be revised to provide a greater operational congruence, a smoother system of articulation. Some vocational teachers in both the D.O.E. and the community college systems have taken the initiative independently and in collaboration with their administrators to explore and develop a framework for more efficient articulation. While they are to be commended for their efforts and the results which they have produced, these efforts lack an overall direction which would make them more effective and productive.

The Office of the State Director for Vocational Education is providing in-service training to help teachers develop more sophisticated professional skills which can be used to develop course objectives and establish course criteria that will anticipate and obviate such student problems as course duplication or repetition. How much more can be achieved and how efficiently that achievement realized depends fundamentally on the importance of improved articulation to administrators, instructors, and students achieving it.

Recommendations. The following prioritized list of recommendations is derived from the data, the interviews, and the sources cited in the complete study which follows. For the purposes of economy of presentation--and in the belief that the recommendations themselves provide a clear inferential basis for the substantive nature of the observations from which they originate--only the recommendations have been presented.

1. COMMITMENTS TO AND PRIORITIES FOR ARTICULATION

After reviewing earlier statements concerning articulation (such as "Articulation Guidelines and Responsibilities," a draft submitted to the Chancellor's Council, Fall, 1975; the "Administrators' Meeting on Articulation Report-Department of Education Session" of March 14, 1975; and the State Master Plan for Vocational Education [Rev. 1974]), the State Director for Vocational Education, the Superintendent of the Department of Education, and the Chancellor for the Community Colleges should issue a statement clarifying their commitments to and priorities for future articulation procedures as well as indicating the organizational means by which those procedures will be implemented. The necessity for this clarification of goals and procedures cannot be too heavily stressed. The joint statement should include:

a. An evaluation of the existing need for change in current policies as those policies impede articulation;

b. A proposal of what central policy should be established to satisfy that need; and

c. A description of what administrative action will be initiated within a specified time frame to implement and operationalize that central policy.

A statement coming from the chief administrators of the three offices most directly concerned with the articulation process would carry the weight of authority and leadership to put other issues concerning articulation (including the relative importance of the recommendations below) in sharper relief and so make them more susceptible to direct and accountable solution.

2. ORGANIZATIONAL STRUCTURE

More organizational structure is required to develop and supervise the procedural mechanics of the articulation process. The State Director for Vocational Education, the Superintendent of the D.O.E., and the Chancellor for Community Colleges should each delegate this responsibility to a person in their office capable of fulfilling the established commitments to and priorities for the process of articulation. Staff positions within the three systems capable of accepting such a change now exist and may provide a solid basis from which to supervise and facilitate articulation. The administrator of the Vocational-Technical Education Section for the D.O.E., the curriculum specialist for vocational education in the Office of the Chancellor for Community Colleges, and the soon-to-be-filled position of coordinator of planning and evaluation in the Office of the State Director for Vocational Education offer the well informed triumvirate of high level administrative leadership that is necessary. The administrative representation from the D.O.E. and the community college system would obviously carry primary responsibilities for their own systems, while the function of the coordinator of planning and evaluation would be to coordinate the efforts and evaluate the progress along with the two other team members.

These representatives would carry responsibility for:

a. Continuing review and evaluation of articulation procedures, problems, and progress.

b. Recommendations to improve those procedures where they are inadequate.

c. Working with students, faculty, counselors and administrators to refine and implement those recommendations.

d. Developing a system of informational feedback to all concerned sectors regarding the progress of problems encountered.

e. Coordinating their efforts to achieve as rapid and positive results as conditions permit.

In turn, the representatives must receive the administrative support necessary for them to fulfill their responsibilities

in meeting the remaining needs--some of which are reflected in the recommendations below--for the development of a more efficient and comprehensive system of articulation.

3. DISSEMINATION OF INFORMATION

Establish a systematic procedure for the organized dissemination of information about what is happening in the field of articulation--what progress is being made, what problems encountered, what plans developed to resolve those problems. No other complaint was registered so strongly and frequently by the teachers as that of not receiving some form of feedback about what action was taken as a result of their participation in and recommendations from the three Articulation Institutes. The absence of such an informational follow-up that reached the level of the participants deprived them of a sense of closure on the articulation project and the concommitant sense of direction that the project was to pursue. Furthermore, this failure of communication precluded the possibility of their realizing the importance of their contributions, time and efforts at the institutes.

The general concern about adequate communication procedures is reflected in the fact that Dissemination of Information (Section II) was second only to Standardization (Section I) in terms of the frequency with which it appeared in the recommendations made by the participants at the institutes. In addition, on the questionnaires both groups of respondents (D.O.E. and community colleges) gave one of their lowest ratings (C.C.: 1.64, D.O.E.: 1.77) to Item E: dissemination of information "from a central clearing house to all sectors." These ratings contrast sharply with their responses to Item A (communication between secondary schools and community colleges) from the same section of the questionnaire which resulted in averages of 2.00 for community college participants and 2.35 for D.O.E. participants. The "free responses" from the participants in Section XII and in the interviews reinforced this fact that one of the most positive results of the institutes grew out of the opportunity the institutes provided for participants from the different systems and institutions to become acquainted with each other as professionals and individuals. Given the importance of such an open relationship between the two educational levels for both academic and articulation goals, the opening of these channels for professional exchange emerges as a significant achievement of the institutes.

Communication is a difficult process at any level for any organization. When it must cope with the dispersal of information within and between two large and complex systems such as the community colleges and D.O.E., the difficulties are compounded considerably. A major contribution from whatever responsible agents are established to supervise the articulation

process will stem from their ability to ensure delivery of the necessary information to the multiple target groups: administrators, counselors, teachers, and students. Many networks for such a comprehensive dissemination of information already exist, e.g., established official channels of the two systems, newsletters, community college catalogues, and student newspapers. What must be done is to develop and realize the possibilities they present.

4. ADVISORY COMMITTEES

To realize more fully the potential of advisory committees, their current status in each vocational department in each high school and each community college should be evaluated. Reports should be requested indicating:

a. The composition of the advisory committee's membership.

b. The activities and effectiveness of its program.

c. The help needed to increase its effectiveness.

Currently, advisory committees are most effective where they work in collaboration with larger community organizations concerned with or directly involved in vocational education, e.g., the State Board of Nursing, unions, apprentice programs, etc. Consequently, there is considerable disparity in the level of effective coordination between the secondary schools, the community colleges and trade and industry representatives. In some cases the level is very high; in others moderately so; and in still others non-existent.

Although both the D.O.E. and community college participants rated the advisory committees as a "meeting ground for community colleges and secondary teachers, and industry representatives" (Item D, Section XI) above the 2.00 level, it was also the lowest rated item in the section. No other existing structure provides such a convenient "meeting ground" for these key aspects of vocational education and vertical articulation from secondary preparation through community college development to vocational placement and performance. This opportunity for interested and qualified community input and involvement in its educational programs along with the direct and regular contact between vocational teachers from the secondary schools and the community colleges should be energetically pursued.

The greatest difficulty in developing the advisory committees to a higher level of organizational effectiveness probably lies in the additional time demands on the committee members. A repeated request by the participants was for time (and in

some cases money) to develop their committees and to meet with them. To compensate them for their additional duties, some schedule of released time or other form of compensation may have to be devised. This would mean additional cost, but the advantages inherent in such a developmental program warrant its consideration regardless of cost factors.

As recommended elsewhere, unless major course revisions were undertaken, three meetings during the academic year should be adequate to meet the needs and fulfill the purposes of these advisory committees--one meeting at the beginning of the school year to discuss the goals and means of the coming year; another at the end of the first semester to evaluate the progress made as well as the adjustments and emphases which might be indicated for the second semester; and a final meeting at the end of the second semester for more comprehensive assessment of the completed year and suggestions for the next. The costs for supporting such a basic program should not be inordinate whereas the educational gains could be considerable.

In addition to providing machinery for the regular exchange and dispersion of ideas between industry and education, advisory committees could provide a structural basis for the state-wide vocational education committees that have been recommended by participants at the Articulation Institutes. Section VIII of the questionnaire (State-Wide Committees) received the lowest evaluations on the entire questionnaire from community college respondents and next to the lowest from D.O.E. respondents. The chairman of each advisory committee could serve as representative to an annual state-wide committee or "congress" of vocational educators and carry the responsibility of reporting back to his local advisory committee. These state-wide committee conferences could be organized around general meetings in the morning dealing with the broader issues of voaational education and their implications for Hawaii, followed by afternoon meetings dealing with the more specific concerns of the separate vocational areas.

A further function to be served by the advisory committees and a larger state-wide conference would be to provide a system for regular input from the vocational departments for proposals on the kinds of needs which in-service training programs should be meeting. While many effective in-service training courses and workshops have been offered, there is room for greater coordination of the program to clarify and realize its objectives. Responses to the questionnaire and from the interviews indicate that teachers from both systems are enthusiastic about in-service training for the growth in professional skills and opportunities which they provide; such enthusiasm should be capitalized upon for the benefit of the teachers and the educational systems.

Again the cost factor necessitates consideration, but once more the benefits of such a meeting as an indication of the priority given to sharing ideas, information, and a sense of common goals and direction may outweigh the costs.

5. PERFORMANCE-BASED ARTICULATION

Current attempts to develop vocational programs based on behavioral objectives as well as present efforts to provide vocational teachers with skills necessary to describe their own course requirements on the basis of performance objectives and criteria should continue to be emphasized. Besides providing sound pedagogical foundations for the classes themselves, programs and courses defined through the use of precise behavioral objectives offer the structural continuity required to develop aspects of course standardization--numbering, requirements, evaluation, credits, sequence, etc.--so essential for a smoother vertical and horizontal articulation. Such standardization is especially needed at the community college level, not only for its own articulation, but also because the vertical articulation of the high schools with the community colleges is in large part dependent on the expectations of the two-year institutions; those expectations should be explicitly (behaviorally) stated.

Another aspect of articulation to be served by the development of behaviorally defined courses is that of advanced placement, a section of the questionniare (VI) which received one of the lowest ratings by the participants. Established performance objectives and criteria would provide a solid basis on which to expand the program of skill certification such as that for typing and shorthand first implemented by the business education teachers of Hawaii Community College and D.O.E./Hawaii and now officially implemented throughout the state. The outstanding results achieved by Kauai Community College last fall in giving advanced placement to ten typing students certified by their high school teachers tend to mitigate the strength of the myth that students perfer to repeat a course either to raise their G.P.A. or just to make their first semester in college an easier one. What the Kauai experience does tend to verify is that at the present time many students are reluctant to challenge courses to prove their skills, but if their past superiority of performance indicates their readiness for advanced placement, they will accept with profit the opportunity to utilize that placement.

To provide this opportunity, agreement must be achieved by the secondary and community college teachers on what skills and what criteria are needed at what level. No better means for specifying those skills and criteria exist than course definition through performance objectives.

6. ARTICULATION WITH U.H. MANOA AND INDUSTRY

Finally, as articulation becomes more fully implemented among and between the community colleges and secondary schools, examination should be directed towards vertical articulation with the Manoa campus. Although this study did not focus on the problems of articulation between the community colleges and University of Hawaii at Manoa, views expressed by teachers and administrators alike indicate the existence of articulation difficulties at that level.

Also only peripheral to this study was the extent of articulation developed between the community colleges, the D.O.E. and the world of employment which their graduates enter. In some vocational areas, excellent articulation already exists at the job entry level, but the comprehensive nature of its existence should be certified to insure students every opportunity to translate their articulated academic skills into productive, meaningful, and self-fulfilling vocational applications.

ARTICULATION OF SECONDARY AND POST-SECONDARY VOCATIONAL EDUCATION PROGRAMS IN HAWAII:

Follow-Up Study II

Chapter I - THE BACKGROUND

During academic years 1972-73, 1973-74, and 1974-75, the Office of the State Director for Vocational Education (with funds from the Education Professions Development Act, Part F, Section 553) organized three institutes for the administrative and instructional staffs from the vocational-technical programs of Hawaii's secondary schools and community colleges. The purpose of the three institutes was to allow participants to meet together to consider how a student's educational progression through the high school and community college levels could be most productively and expeditiously coordinated, a concept and process which current educational literature has frequently termed "articulation." Originally and officially entitled the "Collaborative Roles and Functions of Occupational Education Programs," the project soon came to be known as the "Articulation Project."

An extract from a report submitted by the regents' committee on "Vocational Education and Community College Policies" (APPENDIX B) provides further background information regarding the goals and objectives of the First Institute:

> In October 1972, a project entitled 'Collaborative Roles & Functions of Occupational Education Programs' was initiated by the Office of the State Director for Vocational Education. One of the objectives of this project was to seek ways in which high school programs in auto mechanics, architectural drafting, food service, and office occupations could be interrelated ['articulated'] with similar programs in the Community Colleges. Over 180 instructors and administrators from the Department of Education and Community Colleges participated in the project.

A section of the introduction to the report from that First Institute describes its basic organizational format. Under "Program of Studies," the format is described in the following fashion:

> PROGRAM OF STUDIES
>
> The program of study included three major phases.
>
> Phase I was an orientation and familiarization with selected occupational education programs. Student panels identified the current problems and issues and discussed and reviewed sample programs of articulation. Each participant planned individually and in teams a program of activities.
>
> Phase II was a seminar and conference program to share documents prepared and/or distributed in Phase I; and to arrive at common goals and objectives for each course. Participants also formulated written team recommendations for articulation and options or alternatives on how to implement them. An orientation to selected vocational-technical programs was also included. Phase IIA was a series of four island-wide workshops to present and review the written recommendations developed in Phase II to larger audiences.

Phase III was a seminar and conference program to prepare final drafts of team recommendations in the form of an agreement, one for each area.

Finally, Phase IIIA was a program of information-dissemination. The planners of this project attempted a number of unique activities. First, they brought together four areas of vocational-technical education.

Automotive-Mechanics Occupations
Business Education Occupations
Drafting Occupations
Food Services Occupations

Second, they assembled teams representing the University of Hawaii, the State Department of Education, the community college and instructional staff to share the leadership in developing the institute in each of the four areas. Finally, representatives were invited to participate from all geographic districts of Hawaii.

All participants indicated a responsibility and a willingness to seek out whatever techniques, whatever procedures, whatever devices that may work most efficiently in any given set of circumstances in order to best meet the needs of our clientele--the students in our high schools and community colleges. They believe in the time test adage--NOTHING VENTURED, NOTHING GAINED.[1]

Essentially, then, the First Institute's purpose was to define the articulation problems; recommend solutions for them; and share that information with vocational educators throughout the State. As in the case of the goals and objectives of the First Institute, this "Program of Studies" provided the structure and direction of the ensuing two institutes. What varied in the organization of the institutes was the representation of the occupational disciplines. The following chart indicates the areas of vocational-technical instruction represented at each of the three institutes.

Institute I: 1972-73	Automotive Mechanics	Business Education (Typing/Shorthand)	Drafting	Food Service
Institute II: 1973-74	Business Education, (Acctg. and Data Processing)	Electricity	Electronics	Health Occupations
Institute III: 1974-75	Agriculture	Auto Body Repair & Painting	Carpentry	Distributive Education

[1] Collaborative Roles and Functions of Occupational Education Programs, October 1972-June 1973, Honolulu, Hawaii. Edited by: Lawrence F. H. Zane, University of Hawaii, College of Education, Department of Curriculum and Instruction, 1776 University Avenue, Honolulu, HI 96822.

Boggs' 1975 follow-up study investigated the degree of implementation which had occurred between the spring of 1973 and the spring of 1975 on the basis of the recommendations made by the participants of the First Institute. Since her investigation remains as the most detailed study of these four areas, and since the same areas fall within the purview of this more comprehensive survey, Dr. Boggs' summary is reported below along with bracketed commentaries indicating changes which may have occurred since the writing of her summary.

Dr. Boggs describes the purpose of her study thusly:

> This report is an evaluation of articulation efforts stemming from the FY 73 Articulation Institute recommendations for Automotive Mechanics, Business Education (Typing and Shorthand), Drafting, and Food Service. It should be considered as formative evaluation, that is evaluation which seeks to improve a process before it ends. Evaluative feedback is being channeled to currently ongoing articulation efforts in the Third Institute. The principal objective of this evaluation is to facilitate systematic ways of implementing the recommendations which were developed as a result of statewide efforts to achieve vertical and horizontal articulation.[2]

Under her Summary of Recommendations[3], Dr. Boggs submits the following:

General Recommendations

1. State Board for Vocational Education: Formally re-endorse the concept and intent of articulation and encourage implementation to carry out the goal and objectives of articulation as stated in the 1974 Revised State Master Plan for Vocational Education (p. 7).

   Board of Regents: Support and encourage implementation on the community college level (p. 7).

   [Recommendation implemented: See Appendix B.]

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[2]Final Report, Project No. V0274VZ, Grant No. OEG-0-74-1649, Articulation Among and Between Public Secondary and Post-Secondary Institutions in Hawaii. A Follow-Up Study of the Implementation of the FY 1973 Articulation Recommendations. Research Project in Vocational Education conducted under Part C of Public Law 90-576. Minnie E. Boggs, Ph.D., Office of the State Director for Vocational Education, Special Federal Programs Project, 1776 University Avenue, Wist Hall 209-C, Honolulu, Hawaii 96822, May, 1975. Page 4.

[3]op. cit. Page iv.

2. Provosts of the Community Colleges and the D.O.E. District Superintendents: Declare a commitment to improving articulation between program areas and exercise administrative leadership in the implementation of the agreements (p. 8).

[Recommendation implemented: See Appendix C]

3. State Board for Vocational Education: Establish a position in the Office of the State Director for Vocational Education for the evaluation of vocational education programs in all aspects, including articulation (p. 9).

[Recommendation implemented: State Board has approved a position for planning and evaluation.]

Alternative recommendations:

a. State Board should restore the position of Assistant State Director for Vocational Education, who shall assume responsibilities for evaluation and articulation (p. 9).

[State Board did restore the position. However, it is retitled, "Coordinator of Planning and Evaluation." This position is being filled.]

b. State Board should establish position counts for articulation in the Office of the Chancellor for Community Colleges (horizontal articulation on the community college level) and in the Office of the State Director for Vocational Education (vertical articulation) (p. 9).

[Recommendation implemented: Note a. above; the position of Curriculum Specialist for Vocational Education Programs has been filled in the Office of the Chancellor for Community Colleges.]

4. Provosts: Consider as a first step implementing recommendations not involving systemwide changes in course numbers, credit hours, or contact hours. Support course content equivalency throughout the system through performance criteria and tests based on identifiable competencies (p. 10).

[Recommendation implemented: See Appendix C.]

5. Chancellor for Community Colleges: Transmit information on implementation of recommendations on community college level to Superintendent of Education for dissemination through established channels (p. 11).

[Implementation pending.]

6. Provosts and District Superintendents: Encourage counselors to acquire and apply knowledge of vocational education programs towards an articulated vocational counseling and guidance system (p. 12).

[Implemented.]

D.O.E.: Incorporate an explicit statement of commitment to an articulated vocational counseling and guidance system in the State Master Plan for Comprehensive Guidance (p. 12).

[Not implemented.]

State Director for Vocational Education: Continue to make concerted efforts to provide information on the availability of vocational guidance resources (p. 12).

[Recommendation implemented.]

7. D.O.E. Vocational-Technical Education Section and Chancellor for Community Colleges: Develop a coordinated, annual, long-range inservice education plan for vocational education instructors (p. 12).

[Recommendation implemented by D.O.E.]

State Director for Vocational Education: Continue to fund inservice education for vocational education instructors (p. 13).

[Recommendation implemented.]

Chancellor for Community Colleges, and D.O.E. District Superintendents in consultation with the D.O.E. State Personnel Office: Coordinate and schedule workshops and courses, such as during summer, to accomodate the needs of neighbor island instructors (p. 13).

[Not implemented as prescribed but note Appendices D & G; in addition neighbor island teachers from both the D.O.E. and community colleges have had opportunities to attend workshops on their own islands or else during periods of vacation on Oahu in such diverse areas as Reading for Progress, Carpentry, Drafting, Individualized Instruction, and Automotive Mechanics.]

Specific Recommendations - Automotive Mechanics

Community college

1. Provosts: Initiate action to cooperatively develop uniform performance objectives based on identifiable behavioral competencies by community college and secondary school vocational automotive instructors.

Competencies should be testable through uniform performance tests developed cooperatively by community college faculty with the necessary expertise in evaluation (p. 16).

[Partially implemented.]

2. Chancellor for Community Colleges: Coordinate the scheduling of inservice training opportunities in automotive mechanics for continued flexibility to allow participation by neighbor island instructors (p. 17).

[Not implemented.]

3. Provosts of Hawaii, Kauai, and Maui Community Colleges: Initiate action to include secondary school representation on the college automotive advisory committees (p. 17).

NOTE: This recommendation has now been implemented.

4. The Chancellor for Community Colleges upon consultation with the Statewide Curriculum Council, should specify appropriate channels for the consideration of systemwide curriculum proposals. The Chancellor should specify channels for considering changes in definition of vocational education instructor workload. Furthermore, the question of who is responsible for determining and maintaining course equivalency should be answered. All new courses should be established on the basis of equivalency (p. 19).

[Partially implemented: The Chancellor's office in conjuction with the University's Vice-President in charge of academic Affairs is currently reviewing the feasibility of greater systemwide curriculum standardization. The Chancellor's office has also scheduled a meeting for February 20 with the deans of instruction from the community colleges to examine the means of establishing greater course standardization. The problem of "instructor workload" is now a union negotiable item and does not fall directly or solely under the purview of the Chancellor's office.]

D.O.E.

1. Secondary school vocational automotive instructors: Provide input in the development of performance criteria for automotive courses on the community college level (p. 16).

[Partially implemented.]

2. District Superintendents for Hawaii, Maui, and Kauai: Submit to the Provost of the community college the name(s) of elected secondary school representative(s) on the college automotive advisory committee. Work with the State Director for Vocational Education to see that inservice training opportunities in automotive mechanics continue to be flexible enough to allow participation by neighbor island instructors (p. 18).

   [Partially implemented.]

Specific Recommendations - Typing and Shorthand

Community college

1. Provosts of Kapiolani, Windward, and Leeward Community Colleges should inform their staffs of placement and credit procedures through certification in the event that certification procedures are implemented in all D.O.E. districts (p. 21).

   [Recommendation implemented.]

D.O.E.

1. District Superintendents on Oahu: Implement the recommended certification procedures for typing and shorthand (p. 21).

   [Recommendation implemented: See Appendix E.]

2. Vocational-Technical Education: Print uniform certificates of proficiency to be used in certification procedures throughout the State (p. 21).

   NOTE: This recommendation is now being implemented.

   [Implementation complete: See Appendix E.]

Specific Recommendation - Drafting

Community college

1. Provosts: Support drafting instructors' attempts to improve horizontal articulation through course content equivalency in the form of uniform performance objectives and tests (p. 25).

   [Partially implemented. Provosts supported the general concept of horizontal articulation through uniform performance objectives.]

Hawaii, Honolulu, Kauai, and Maui Community Colleges: Review evaluative instrument developed cooperatively by Leeward Community College and D.O.E. for possible use in their drafting programs (p. 25).

[Implementation pending further validation of instrument.]

2. Hawaii, Honolulu, Kauai, Leeward, Maui: Invite participation of secondary school vocational drafting instructors on college drafting advisory committees (p. 26).

NOTE: This recommendation has now been implemented at Hawaii, Honolulu, Kauai, and Leeward Community Colleges. Maui will take steps to do so.

[Implementation complete.]

D.O.E. and Community College:

1. Intensive summer workshops and courses on Oahu should be available to accommodate the needs of both Oahu and neighbor island drafting instructors (p. 25).

[Being planned for Summer, 1976. Limitation on the number of courses community college teachers can take or teach is causing problems.]

Specific Recommendations - Food Service

Community college

1. Statewide Curriculum Council: Disseminate to all community colleges information on authorized procedures for making systemwide changes in course numbering and titling. If authorized procedures are followed for renumbering Food Service courses and necessary approval obtained, implementation should occur at the same time on all campuses with food service programs (p. 27).

[Not implemented]

2. Hawaii and Leeward Community College Provosts: Consider implementation of the Food Service course credit options (p. 28).

[Not implemented.]

D.O.E.

1. Secondary school foods program instructors: Work in closer coordination with community college instructors so that students are prepared to exercise community college course credit options (p. 28).

   [Partially implemented.]

This review of Dr. Boggs' follow-up study, as well as the subsequent implementation achieved, indicates the continued progression towards the articulation of the recommendations from the First Institute. Because of the many variables involved and the fact that responsibility for implementation was never clearly defined, the process has been a gradual one. Considerable evidence presented later in this study suggests the process will be accelerated. At the moment, however, in the light of Dr. Boggs' intent to provide "evaluative feedback . . . to currently ongoing articulation efforts in the Third Institute," it is worth noting here that in terms of attitude concerning the value and productivity of the institutes and the goals of articulation, the participants of the Third Institute carried a far more positive view than did the members of the First or Second Institutes. While the evidence is not complete, the data strongly support the hypothesis that Dr. Boggs' "formative evaluation" process had salubrious impact on the results of the Third Institute.

Chapter II. THE PRESENT STUDY

In the summer of 1975 a federal grant from EPDA, Part F, Section 553 funds was awarded to the State Board for Vocational Education for the following purposes:

1. Provide an opportunity for the FY 1973, FY 1974 and FY 1975 articulation participants to meet with the administrators from the Department of Education, Community Colleges, University of Hawaii, and other manpower agencies to discuss articulation studies recommendations and develop strategy for the implementation thereof.

2. Conduct studies to see to what extent the FY 1974 and FY 1975 articulation recommendations can be implemented.

3. Conduct in-service training workshops or institutes to develop performance-based articulated curricular in vocational education and also develop specific competencies in vocational guidance and career counseling.

4. Disseminate useful information and materials on the articulated vocational education programs to students, instructors, counselors, administrators and others.[1]

The overall purpose of this proposal was to consolidate and further advance the gains that had been made since the program to promote horizontal and vertical articulation between and among the secondary schools (especially of the Department of Education) and the community colleges in the State of Hawaii was initiated in the fall of 1972. In keeping with this overall proposal, the specific purpose of the present study became to evaluate as accurately as possible the current status of vertical and horizontal articulation in the twelve major areas of vocational education surveyed in the reports from the three articulation institutes of 1973-75. At an October 10, 1975 meeting of the Executive Committee for the EPDA Part F (553) Project, the proposed purpose of this study was approved and its scope and methodology were reviewed, defined and also approved.

In brief, the scope of the subject of the study was limited to the three articulation institutes. Other secondary variables were limited to:

1. Information materials from the three institute reports, Boggs' Follow-up Study, and other related reports.

2. Geographical factors, i.e. Hawaii's four most populated islands (Oahu, Hawaii, Maui, and Kauai).

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[1]Application for Federal Assistance, Narrative Overview, p. 1.

3. Population samples from

   a. Participants of the three institutes;

   b. Community college and D.O.E. participants who played key roles (as team or assistant team leaders) at the institutes -- and who often played key academic roles (as department or former department chairmen) in their respective institutions; and

   c. Administrative officers from the seven D.O.E. district offices and the seven community colleges most directly concerned with the problems of articulation in vocational education.

The methodology of the study was developed from evaluative needs for a design that would provide an extensive, efficient, and flexible form of coverage. The requisites for wide coverage and efficiency were met through the development of a questionnaire, which in itself was not totally restrictive. This questionnaire was sent to all Institute participants soliciting their responses; informational copies were made available for all administrative offices of the community colleges and the D.O.E.

The requirement for flexibility of response for the respondent was guaranteed to some degree in the questionnaire's format, but it was limited and one-way. Consequently, to provide both respondents and researcher with a vis a vis flexibility as well as to tap the administrative sample, interviews (personal or telephone) were arranged with the key community college and D.O.E. participants from each of the twelve vocational areas and D.O.E. and community college administrators.

The remainder of this chapter examines the mechanics, the results, and the implications of these two investigative operations. The final chapter offers tentative conclusions derived from the data and looks to the future of academic articulation in Hawaii.

A. The Articulation Questionnaire

The Articulation Questionnaire is presented in Appendix A. Its design is simple and straightforward. In order to provide the respondent with the greatest amount of freedom in his responses, no names were required. Even so, many questionnaires were returned with the covering letter which carried the respondent's name or else the questionnaire itself was signed by the respondent. The format of the questionnaire was also designed to provide maximum anonymity for the participants. It was later realized that given some of the limited and specialized programs that exist both in the D.O.E. and community college programs, by asking the participants to indicate their teaching status and subject area there was danger of identity disclosure. No participant, either on the questionnaire or during interviews, ever alluded to that format problem. Some indicated they did not think the questionnaire would serve its stated purpose, and others expressed frustration at not being able to respond to some of the sections or items, but

no one indicated anxiety about having to evaluate a "system" or a department. Eleven questionnaires were returned without indicating the participant's specific teaching area. This portion of the sample may have wished to preserve more complete anonymity. The Executive Committee to the project and the five major program specialists of the D.O.E. had reviewed the questionnaire and offered suggestions which were incorporated in its final form. No one from these two groups had seen anything which might provoke anxiety for the respondents in either the content or format of the instrument, and the responses suggest honesty and openness were the prevailing attitudes of the participants.

Another fact supporting the positive attitude with which the questionnaires were responded to lies in the rate of return. One hundred and ninety-six questionnaires were sent out to 164 participants (some participated in more than one institute); over a hundred were returned. Such a "No-name-required" rate of return for a questionnaire that requires at least a half hour to complete reflects the professionalism of the participants as well as their interest and concern in the problems of articulation.

Figures in Table 1 show the number of questionnaires sent out to each subject area by system (D.O.E. or community college) and by institute year as well as the number of returns and the percentage of those returns by the same variables. Table 2 provides totals for these variables by institute year and by system. The figures presented in these two tables are important. This is especially true for Table 1, for although the descriptive statistics used in this study (mean, standard deviation, and range) give order to an otherwise unwieldly mass of data, they nonetheless provide some distortion by combining figures and treating them as though they were of equal magnitude. Besides giving us an analysis of the distribution and return of questionnaires, Table 1 should serve as a constant reminder that even though measures of central tendency and dispersion do distort in this fashion, the necessity to obtain a quantifiable evaluation of the participants' concerns over a large variety of aspects of articulation requires this statistical distortion.

The questionnaire was developed by reviewing the recommendations compiled in the three articulation reports. These recommendations were then categorized according to their substantive concern; the categories emerged as Sections I - XI in the questionnaire. As mentioned earlier, these eleven sections are presented in rank order in the format of the questionnaire according to the frequency with which the categories (section titles) were cited. For example, recommendations to improve the articulation process dealing with various facets of course "standardization" received more frequent mention than any other category, and so comprise the first section of the questionnaire. Recommendations dealing with "dissemination of information" were the second most frequently mentioned, as their format position in Section II of the questionnaire indicates. It may well be that the frequency with which a category is mentioned is suggestive of its relative importance to the participants. Certainly in an academic process such as articulation which is so dependent on the coordinated structures and efforts of multiple institutions, concern for course standardization and dissemination of information is a sine qua non.

While the format of the questionnaire is essentially self-explanatory, certain irregularities should be noted:

1. The section on standardization is presented in two parts, I and IA, the former dealing with horizontal articulation the latter with vertical. The item pool, i.e. "Course Aspect," is nonetheless identical.

2. Section IV, Vocational Guidance, is also divided into two parts. The first focuses on help offered by teachers to their students; the second focuses on help offered by counselors.

3. The five items listed in Section V were not lettered on the original stencil, but the same alphabetical ordering should be imposed, i.e., A,B,C,D, and E.

4. Section XII offers a different format for the respondent. As noted in the "INSTRUCTIONS," it was included to provide a "catch-all" for variables overlooked by the questionnaire or for any other responses which the participants might wish to include.

5. Finally, the questionnaire does not pretend to be a highly sophisticated or sensitive measurement instrument, but the results suggest that it provided an effective and discriminating device for participant input and also for participant instruction.

The questionnaire breaks down into a total of eleven objective sections plus the essay-type Section XII. The eleven objective sections present 86 items; the number of items per section ranges from a high of sixteen in Sections I and IA (Horizontal and Vertical Standardization) to a low of three in Section IX (Teacher Input). Given the 106 returned questionnaires, the total possible number of item responses was 9,116. The total actual number of item responses was 6,808--75% of the possible total. Table 3 presents an analysis of the total number and percentages of responses by section and by system.

These responses lend themselves to a variety of patterns for analysis. The most obvious of these is a statistical analysis of each of the 86 items. Such an analysis is presented in Table 4. Table 4 shows the number of responses (N); the mean value of those responses (M); and the standard deviation (SD) of the responses for each item. The significance of the M in this study lies in its statistical properties which permit it to serve as the most stable indicator of the central tendencies of a group of scores. For this study it serves as a general (and relative) index of the degree of satisfaction with the item's content. For example, in Section I the community college respondents had a mean of 2.58 (on the evaluation scale of 1-4) in their response to Item B (Objectives). In contrast, these same respondents had in the same section a mean response of only 1.77 to Item I ["eye"] (Total Contact Hours). The discrepancy sug-

gests there is a higher level of satisfaction with the status of course objectives as they pertain to program standardization than there is with the current organizational state of total contact hours.

Just as the mean suggests a general index of satisfaction for a given item, the standard deviation may be viewed as a general index of the degree of respondent agreement about the point at which the mean falls. The function of the standard deviation is to describe the extent of dispersion of a group of scores around the mean; consequently, the smaller the standard deviation, the smaller the spread of scores, and so the greater the agreement of the respondents on what their evaluation of the item should be. In addition to providing the means and standard deviations of the responses for each item, Table 4 is also informationally important because it shows the number of participant responses by system per item, a fact which is subsumed in the totals of Table 3.

Table 5 pursues the kind of analysis suggested above where the mean response of two items (P and I) from Section I (one) were contrasted. In many respects Table 5 is the heart of this study, for it indicates on a relative basis the items from each section viewed most positively and most negatively. Because of its centrality to the study and its considerable length, Table 5 is incorporated directly into the expository text for convenience sake.

Table 5 was derived after ranking the means established by the item analysis of Table 4. What Table 5 provides are those items ranked highest and lowest for each section of the questionnaire. No attempt was made to provide rank ordering for all items for all sections. Rather, in most instances the cluster of highest means was selected to indicate those items in each section which the participants evaluated as having been most fully articulated. In this same way, the lowest means were selected to demonstrate which items had progressed least towards the goal of articulation in the eyes of the respondents. However, the intervening scores between the upper and lower limits may be determined. In addition, Table 6 provides a more concise comparison of the dispersion and dichotomy of the scores presented in Table 5.

The general procedure for the selection of these scores was in part statistical and in part arbitrary as far as the number of scores selected to represent each section. After ranking the scores for the sections, those scores which "clustered" at the upper and lower limits of the distribution were winnowed off. If the number of item responses in a given section were large, a larger number of scores was selected. For example, Sections I and IA contain the largest number of items (16 in each); consequently more items were selected to provide a larger number for comparison. Several exceptions to this general procedure should be noted. Because of the relatively small number of items in Sections II, V, and VI, all five items were tabulated. The bipolarity of some of their distributions provides additional reason for their complete presentation. Another exception to this basically Procrustean techniques appears with Sections IX and XI, where a total number of 3 and 4 items in each case lent themselves to complete presentation.

B. Results - Item Analysis

1. Horizontal standardization (Section I)

Table 5. Range of M & SD
(Upper & Lower Limits)
By Item & by System

I. Horizontal Standardization: To what extent have the following aspects of courses been made uniform to facilitate the horizontal transition of students within the secondary schools or the community colleges?

(16 Items)

	Item Aspect	Item Letter	Item M	Item SD
C.C.: Upper Limits	Objectives	B	2.58	1.02
	Content	A	2.54	.99
	Philosophy	C	2.37	.96
C.C.: Lower Limits	Total Contact Hours (Per course)	I	1.77	.90
	Adherence to D.O.E. State Curric. Guide	P	1.92	.86
	Numbering	D	1.98	1.10
D.O.E.: Upper Limits	Content	A	2.79	.84
	Philosophy	C	2.78	.96
	Objectives	B	2.71	.92
D.O.E.: Lower Limits	Scheduling	J	1.97	1.22
	Transfer Mech.	O	2.20	.90
	Sequence	K	2.27	.61

There is exceptional agreement between the community college respondents and the Department of Education respondents over the fact that Items A, B, and C (Course Content, Objectives, and Philosophy) have acheived considerable standardization. No such agreement emerges from the Lower Limits where community college respondent ranking of items I, P, D, (Total Contact Hours, Adherence to D.O.E. State curriculum guides, and Course Numbering) are distinct from Department of Education respondent's lowest: J, O, and K (Scheduling, Transfer Mechanics, and Sequence).

2. Vertical Standardization (Section IA)

IA. Vertical Standardization: To what extent have the following aspects of courses been made uniform to facilitate the vertical transition of students between the secondary schools and community colleges?

(16 Items)

	Item Aspect	Item Letter	Item M	Item SD
C.C.: Upper Limits	Content	A	2.28	.96
	Objectives	B	2.20	.86
	Transfer Mech.	O	2.13	1.11
C.C.: Lower Limits	Total Contact Hours	I	1.53	1.48
	Scheduling	J	1.54	.66
	Numbering	D	1.74	.85
D.O.E.: Upper Limits	Content	A	2.43	.90
	Objectives	B	2.41	.88
	Requirements	F	2.38	.98
D.O.E.: Lower Limits	Scheduling	J	1.91	.78
	Sequence	K	2.00	.78
	Total Contact Hours	I	2.00	.97

Again there is considerable consensus between the community college respondents and Department of Education respondents that Content & Objectives are positive aspects serving vertical articulation, and even their third choices -- Transfer Mechanics and Requirements -- are related. Community college respondents retain Total Contact Hours & Numbering in their bottom three while Department of Education respondents maintain equal consistency by again rating Scheduling & Sequence in their lowest three.

Comparing Sections I & IA, strong agreement emerges between the two responding populations as far as what aspects are positive and what are less positive. The most salient exception would be the community college respondents' high rating of "Transfer Mechanics" in Section IA and Department of Education respondents' low rating of that same variable in Section I. A higher general satisfaction with aspects of horizontal articulation is reflected than with vertical articulation. Means are higher for Section I Upper Limits for both populations, and the third ranked score for Section I was higher in each population than the highest score in Section IA. Lower Limits were also lower for all six aspects of Vertical Standardization, and the standard deviations reflect more agreement on the values given to the items of Vertical Standardization.

3. Dissemination of Information (Section II).

II. Dissemination of Information: Has the flow of information increased within the following sectors?

(5 Items)

	Item Sectors	Item Letter	Item M	Item SD
C.C.: Upper Limits	Among community colleges	D	2.48	1.17
	Between secondary schools and community colleges	A	2.00	.86
C.C.: Lower Limits	Between community colleges and four-year institutions	B	1.49	.70
	Among secondary schools	C	1.50	.65
	From a central clearing house to all sectors	E	1.64	.84
D.O.E.: Upper Limits	Among secondary schools	C	2.49	.96
	Between secondary schools and community colleges	A	2.35	1.00
D.O.E.: Lower Limits	From a central clearing house to all sectors	E	1.77	.85
	Among community colleges	D	2.08	1.00
	Between community colleges and four-year institutions	B	2.13	.99

The pattern of responses here is especially interesting. Both community college respondents and Department of Education respondents view the flow of information within their own systems highest at almost the same level of satisfaction. Both also rate information flow between secondary schools and community colleges as second best, with the community college respondents reflecting a lower level of satisfaction.

Both rate a "higher power" lowest as far as information sharing is concerned; both rank each other in penultimate position; and both rate the other's lowest item as their median item. The means of the Department of Education respondents are higher in each case while the standard deviations of the community college respondents run lower in all but one case. Positive is the relatively high ratings that each population gives to its own system as is the Department of Education respondents' general satisfaction with information flow

between almost all sectors. In addition, while articulation between the community colleges and four-year institutions was not a concern of this study, the low mean and low standard deviation which the item carries suggest high agreement and low satisfaction. Finally, the positive attitude reflected towards the dissemination of information within their own systems and between each other's systems by both the community college respondents and the Department of Education respondents suggests that the three Articulation Institutes have achieved measurable success with one of their most important goals.

4. Inservice Training (Section III).

III. In-Service Training: To what extent have your opportunities to take in-service training been increased due to programs offered through:

(7 Items)

	Program Vehicle	Item Letter	Item M	Item SD
C.C.: Upper Limits	Workshops (utilizing DOE or community college personnel)	A	2.17	.93
	Workshops (trade or industry)	F	2.11	1.07
C.C.: Lower Limits	Teacher exchange	D	1.30	.80
	Appropriate arrangement of time and place	G	1.68	.74
D.O.E.: Upper Limits	Workshops (utilizing DOE or community college personnel)	A	2.59	.96
	University of Hawaii courses	E	2.12	.94
D.O.E.: Lower Limits	Teacher exchange	D	1.61	.90
	Seminars	B	1.88	.90

Approval from both samples for in-service training derived from workshops utilizing D.O.E. or community college personnel is substantial. Responses also indicate considerable interest on the part of D.O.E. and community colleges concerning the possible utilization of teacher exchange as an aid to professional development.

The expressed concern for appropriate times for workshops is a difficult problem everywhere; the geography of Hawaii compounds the problem of appropriate time by adding the problem of "difficulty" of place. Seminars are relatively impractical for large scale in-service training.

5. Vocational Guidance (Section IV).

IV. Vocational Guidance: [Teachers] (4 Items) — In what ways have students been helped by teachers to understand the options they may exercise to reach their vocational and educational goals?

	Item Option	Item Letter	Item M	Item SD
C.C.: Upper Limits	Career guidance	A	2.55	.76
C.C.: Lower Limits	Advanced placement exams	C	1.86	.80
D.O.E.: Upper Limits	Career guidance	A	2.79	.81
D.O.E.: Lower Limits	Advanced placement exams	C	1.92	.84

IV. Vocational Guidance: [Counselors] (4 Items) — In what ways have students been helped by counselors to understand the options they may exercise to reach their vocational and educational goals?

	Item Option	Item Letter	Item M	Item SD
C.C.: Upper Limits	Early admissions to community colleges	D	2.32	.98
C.C.: Lower Limits	Advanced placement exams	C	1.91	.81
D.O.E.: Upper Limits	Career guidance	A	2.24	.85
D.O.E.: Lower Limits	Advanced placement exams	C	2.11	1.13

As noted previously, Section IV is divided into two parts, one aimed at the impact of teachers, the other at the impact of counselors on helping students "to reach their vocational and educational goals."

Community college respondents and Department of Education respondents hold very similar views of this impact both at the Upper and Lower Limits of their evaluation. Their rankings of the items in Section IV are almost identical and the standard deviations suggest a high degree of agreement on the level of those evaluations. Career Guidance garners three of the four possible highest rankings on the two parts of Section IV. It is replaced by "early admission

to community colleges" in the Upper Limits of the community college responses in the "counselor" oriented part of the Section; Career Guidance nonetheless still receives high scores (M = 2.23, S.D. = .81) from the community college respondents. There is even more complete agreement between the two populations at the other end of the evaluative continuum where the item option "advanced placement exams" was rated last in all four cases.

6. Resources (Section V).

V. Resources: How well are the following community resources being used to improve learning opportunities for teachers or students?

(5 Items)

	Item Resource	Item Letter	Item M	Item SD
C.C.: Upper Limits	Industry	A	2.59	1.06
	Business	B	2.49	1.01
C.C.: Lower Limits	Unions	C	1.80	1.06
	Government	D	1.81	.80
	University of Hawaii	E	1.83	.82
D.O.E.: Upper Limits	Business	B	2.56	1.02
	Industry	A	2.42	1.03
D.O.E.: Lower Limits	Government	D	1.83	1.01
	Unions	C	1.91	1.00
	University of Hawaii	E	2.16	.95

Again there is high positive correlation between the two populations over the rankings of the variables in this section. "Industry" and "Business" are reversed in order at the Upper Limits but both have means which set them a good distance apart from the ratings given to the items of the Lower Limits. Even the standard deviations --which tend to be comparatively large--are highly and positively correlated. The bipolarity of the section is striking.

7. Advanced Placement (Section VI).

VI. Advanced Placement: (5 Items) To what extent do community college students now seek to avoid duplicating coursework taken in high school by demonstrating their competency through:

	Item Means Employed	Item Letter	Item M	Item SD
C.C.: Upper Limits	Performance examination	C	2.02	1.07
C.C.: Lower Limits	Oral examination	B	1.38	.63
	Recommendations (with accompanying job skills) from former employers	E	1.59	.81
	Prior teacher's performance-based recommendation	D	1.75	.93
	Written examination	A	1.76	.86
D.O.E.: Upper Limits	Prior teacher's performance-based recommendation	D	2.13	1.14
D.O.E.: Lower Limits	Oral examination	B	1.61	.70
	Recommendations (with accompanying job skills) from former employers	E	1.95	1.00
	Written examination	A	1.95	.67
	Performance examination	C	1.95	.87

Predicting on the basis of the low evaluation given to "advanced placement" in Section IV (Vocational Guidance), the results of Section VI are not surprising. The snail-shaped skewing of the scores' bipolarity also tends to corroborate the negative evaluation given "advanced placement" in Section IV.

8. Program Development (Section VII).

VII. Program Development: Is program planning now more adequate and realistic with regard to:

(5 Items)

	Item Variable	Item Letter	Item M	Item SD
C.C.: Upper Limits	Diversity of student talent	D	2.60	1.51
C.C.: Lower Limits	Teaching load	E	2.00	.95
D.O.E.: Upper Limits	Program implementation	C	2.40	.84
D.O.E.: Lower Limits	Facilities	A	1.93	.92

The responses by item for the two populations in this section vary considerably. What is common to both is a generally high level of satisfaction with the variables surrounding Program Development; even the lowest ranked items are not very low on the evaluation scale, and except for community college respondents Upper Limits, the standard deviations reflect a fair level of evaluative consensus.

9. Statewide Committees (Section VIII).

VIII. State-Wide Committees: To what extent have state-wide articulation committees been developed for:

(5 Items)

	Item Process	Item Letter	Item M	Item SD
C.C.: Upper Limits	Professional improvement	C	1.73	.87
	Program coordination	D	1.69	.87
C.C.: Lower Limits	Program evaluation	B	1.58	.84
	Continuous program review	A	1.60	.81
	Central information dissemination	E	1.63	.85
D.O.E.: Upper Limits	Program evaluation	B	2.05	1.09
	Program coordination	D	2.02	1.01
D.O.E.: Lower Limits	Continuous program review	A	1.91	1.09
	Central information dissemination	E	1.95	.92
	Professional improvement	C	2.02	1.07

This section received the lowest score of the entire questionnaire for the community college respondents and the next to the lowest for the Department of Education respondents.

10. Teacher Input (Section IX).

IX. Teacher Input: To what extent have opportunities for teacher input been increased in the:

(3 Items)

	Item Area	Item Letter	Item M	Item SD
C.C.: Upper Limits	Mechanics and procedures for articulation	C	2.32	.81
	Development of course criteria	B	2.30	.85
C.C.: Lower Limits	D.O.E. State curriculum guides for vocational subjects	A	1.80	.95
D.O.E.: Upper Limits	D.O.E. State curriculum guides for vocational subjects	A	2.40	1.09
	Development of course criteria	B	2.31	1.16
D.O.E.: Lower Limits	Mechanics and procedures for articulation	C	2.05	1.00

This section is almost as high in its evaluation as Section VIII (State-Wide Committees) was low. Community college respondents lower limits rank is the only score below a 2.00, and general satisfaction is indicated by the data.

11. Student Options (Section X).

X. Student Options: To what extent have the following student options increased?

(7 Items)

	Item Option	Item Letter	Item M	Item SD
C.C.: Upper Limits	Typing and shorthand certification	C	2.64	1.15
	Early admissions to community colleges	A	2.32	.99
C.C.: Lower Limits	Advanced level (more specialized) courses	D	1.77	.72
D.O.E.: Upper Limits	Early job entry	B	2.65	1.38
	Early admission to community colleges	A	2.41	.95
D.O.E.: Lower Limits	Easier transfer within a program area	G	2.23	.73

Community college respondents' and Department of Education respondents' satisfaction with the ever-increasing number of secondary students seeking and obtaining early admissions to community college courses appears to be reflected in the mean score for that option. Since early admissions is in itself an important aspect of the goals of articulation, it is worth noting that both populations take a positive view of its progress. The certification of secondary students in typing and shorthand has been in the vanguard of strategies to avoid course duplication; the success of its implementation is suggested in its being ranked first by the community college respondents. Department of Education respondents' ranking of this option demonstrates satisfaction as well.

12. Advisory Committees (Section XI).

XI. Advisory Committees: How effective has your Advisory Committee been in providing:

(4 Items)

	Item Variable	Item Letter	Item M	Item SD
C.C.: Upper Limits	Information about industry changes and developments	C	2.94	.87
	Guidance in developing or modifying your program	A	2.83	.92
C.C.: Lower Limits	Meeting ground for community colleges and secondary teachers, and industry representatives	D	2.44	1.09
	Professional stimulation	B	2.67	.88
D.O.E.: Upper Limits	Professional stimulation	B	2.39	1.05
	Guidance in developing or modifying your program	A	2.28	1.39
D.O.E.: Lower Limits	Meeting ground for community colleges and secondary teachers, and industry representatives	D	2.27	1.14
	Information about industry changes and developments	C	2.27	1.05

The comparatively prolonged and productive relationship of the community college respondents with advisory committees is reflected in the high means and generally diminutive standard deviations assigned to the four variables. Section XI has the highest combined mean score of any section for the community college participants, while there are only three other sections which have a higher mean for the Department of Education respondents.

Results - Section Analysis

In addition to analysis by item, the questionnaire also provides convenient data to analyze by section. While Table 4 (Item Analysis) provides the mean and standard deviation for each item of a section (by year of institute and by system: Community College or D.O.E.), Table 8 (Sectional Analysis) provides the means and standard deviations of each section (by vocational area, by year of Institute and by System). Like Table 4, Table 8 presents precise and comprehensive data that disappears when additional statistical distillation is attempted.

Just as Table 5 indicates which items within a section were rated highest and lowest as far as the effective degree of their implementation was viewed, Table 8 indicates how the participants from each of the twelve vocational subject areas evaluated the extent of successful articulation for each of the objective sections. It also indicates the number of respondents from each of the vocational areas, a significant piece of data in its own right. If then the means and standard deviations of Table 5 can be interpreted as suggesting the degree of satisfaction of the participants with a given item and their level of agreement on the level of that satisfaction, then Table 8 suggests the degree of satisfaction of the twelve vocational subject areas with a given section and--again--the extent of their agreement as reflected in size of the standard deviation.

Such an analysis provides a basis for comparing the vocational areas not only separately for each of their sectional responses but also as a means of comparison.

1. Within their own system (community college subject areas compared with community college subject areas --- D.O.E. subject areas compared with D.O.E. subject areas);

2. Between the subject areas of the two systems (community college compared with D.O.E.); and finally

3. Among the subject areas of each of the three Articulation Institutes (Articulation Institute I compared with Articulation II, Articulation II with Articulation III, etc.)

For example, an examination of the mean score (1.19) achieved by the two participants from Business Education (Typing/Shorthand) in response to Section I (Horizontal Standardization) provides the following information:

1. Lower means were scored by the two respondents on only two of the ten other sections -- 1.14 for Section II (Dissemination of Information) and 1.10 for Section VIII (State-Wide Committees).

2. No lower mean for Section I was scored by any of the other community college subject areas.

3. No lower mean for Section I was scored by any of the D.O.E. subject areas.

4. Ergo, Business Education (Typing/Shorthand) had the lowest mean for Section I of any of the three Articulation Institutes.

These facts must also be weighed in the light of the number of participants for any of the vocational subject areas. In the above example, seven questionnaires were sent out to Business Education (Typing/Shorthand) participants and two were returned. Whether the other five were more negative in their evaluation of the variables of the questionnaire and so did not bother to respond -- or whether the other five thought that the process of articulation was progressing satisfactorily and so did not bother to respond-are questions this instrument was not designed to answer. Furthermore, since the tabulation of the results of the questionnaire had not been completed while personal interviews were being conducted, clarification of questions such as these could not be made. What is known from the questionnaire responses is that the two respondents from Business Education (Typing/Shorthand) do not believe that much has happened to improve horizontal standardization and their agreement level is high on this particular evaluation instrument at this particular time.

Table 9 is a condensation of Table 8 and attempts to present much of the comparative information of Table 8 in a more precise form. Again it must be remembered that the identity of the individual variables tends to be obscured in this condensation, but the reference value of Table 8 lies in its ability to provide more ample information for the purpose of clarification when needed. Table 9 was constructed by averaging the mean scores of the eleven objective sections of the questionnaire by vocational area. In this manner, total disparities in responses are set off more clearly--and the basis for these disparities in turn can be examined more particularly in Table 8 as well as in the other tables of the study in order to derive a more comprehensive understanding of the data.

For example, in studying Table 9 one of the most salient figures that emerges from the data of Articulation Institute I is the high standard deviation of Food Services. No other standard deviation on the table approaches it. The closest standard deviation to it from community college subject areas is Auto Mechanics (SD = .76) and the highest standard deviation from D.O.E. subject areas is Electricity's .69. Since the mean score for Food Services is also somewhat extreme (M = 2.38, Rank 2), there is obviously an extensive dispersion of the sectional scores. While part of this dispersion may be attributed to the fact that there is only one respondent, N's of one do not predicate large standard deviation scores (compare with N's of one in Electricity and community college Agriculture). Statistically, smaller populations tend to produce smaller standard deviations. Therefore, the dispersion must derive from relatively extreme scores of the sections. Examining those sectional means of Food Services from Table 8 the following profile emerges:

COMMUNITY COLLEGE FOOD SERVICES: ARTICULATION INSTITUTE I (Respondent N=1)

SECTION	# of Items	# of Responses	M of Responses	SD of Responses
I. Horizontal Standardization	16	16	2.19	1.40
IA. Vertical Standardization	16	15	1.60	.91
II. Dissemination of Information	5	4	3.25	.82
III. In-Service Training	7	7	2.71	.76
IV. Vocational Guidance (Teachers)	4	4	2.75	1.26
IV. Vocational Guidance (Counselors)	4	4	2.50	1.29
V. Resources	5	5	4.00	0.00
VI. Advanced Placement	5	5	1.00	0.00
VII. Program Development	5	5	1.00	0.00
VIII. State-Wide Committees	5	5	1.00	0.00
IX. Teacher Input	3	2	3.00	0.00
X. Student Options	7	6	1.25	.50
XI. Advisory Committees	4	4	4.00	0.00

The extensive dispersion of both the means and the standard deviations is obvious, and so too are the Upper and Lower Limits of the scores. The respondent's scores suggest he is perfectly satisfied with sections relating to resources and advisory committee, highly satisfied with sections relating to dissemination of information and teacher input, and quite satisfied with vocational guidance and in-service training. On the other hand, the scores reflect considerable dissatisfaction with the sections related to advanced placement, program development, state-wide committees, student options, and vertical standardization. An unusual aspect of the scores is that the response to all items in six of the sections (SD=0.00) was made with the same numerical rating, and this statistical aberration is a characteristic of very small samples.

The examination of one more profile may serve to put the informational (diagnostic) dimensions of Tables 8 and 9 in perspective. Table 9 shows that Agriculture for D.O.E. has a relatively high rank (4) for its mean (2.38) and a near median rank (6) for its standard deviation.

D.O.E. AGRICULTURE: ARTICULATION INSTITUTE III (Respondent N=6)

SECTION	# of Items	# of Responses	M of Responses	SD of Responses
I. Horizontal Standardization	16	96	2.36	1.24
IA. Vertical Standardization	16	71	1.86	.66
II. Dissemination of Information	5	19	2.37	1.16
III. In-Service Training	7	39	1.44	1.17
IV. Vocational Guidance (Teachers)	4	22	2.45	1.24
IV. Vocational Guidance (Counselors)	4	22	2.41	.59
V. Resources	5	20	2.45	1.24
VI. Advanced Placement	5	NR	NR	NR
VII. Program Development	5	30	2.63	.96
VIII. State-Wide Committees	5	30	2.20	1.13
IX. Teacher Input	3	16	3.00	1.48
X. Student Options	7	27	2.30	1.41
XI. Advisory Committees	4	14	3.14	1.32

The sectional means of the six respondents reflect a generally favorable view of the items presented in the questionnaire. High level of satisfaction is reflected over the sections on advisory committees and teacher input, and substantial satisfaction with most of the other sections. The most outstanding exception is the low mean (1.44) for in-service training and a relatively low evaluation for the state of vertical standardization, a section to which they responded neither so positively nor so numerically as they did to horizontal standardization but with considerable agreement as reflected by the .66 SD. Pursuing numerical responses, none of the six participants responded to Section VI (Advanced Placement) and a response ratio of only about two-thirds (27 out of 42 possible responses) exists for Section X (Student Options).

What the item analysis of Tables 4-7 and the sectional analysis of Tables 8 and 9 provide, essentially, are two different ways of looking at the same material. The focus of the former is on the individual item in the attempt to provide as clear a picture as possible of how the item

variables (aspects, programs, vehicles, areas, resources, committees, etc.) were seen by the participants as contributing to or detracting from the implementation of recommendations made to facilitate articulation. The sectional analysis, on the other hand, is not so concerned with the discrete symptoms of the item as it is with the sectional syndrome--the attitude of the participants towards a number of items dealing with the same basic issue. Through a study of these analyses, supplemented by the participant's comments made in Section XII, an estimate (derived from a quantifiably relative scale of evaluation) can be determined about the participant's level of satisfaction with the degree of implementation of some of the critical areas related to the articulation process.

In Section XII, Future Facilitation, a total of 67 participants (C.C.=39; D.O.E.=28) representing 63% of those who returned their questionnaires responded to this open-ended item (Table 10). These less objective responses (in terms of their format) reinforce much of the information provided in responses to the first eleven sections, but Section XII offered respondents the opportunity to elaborate and emphasize their points.

For example, in reference to horizontal standardization, one community college participant wrote:

> Nothing has been done to implement the problem. [sic] Due to difference in contact hours and program scheduling between community colleges.

Another suggested:

> Essentially NO demand for horizontal transfer from program to program, island to island. Therefore little stimulus to work on this.

Still others were more succinct:

> Articulation is one thing. Implementation is another--- implementation takes money!

The range of the comments was extensive. Most persons requested more of whatever variable they were responding to: more standardization, more information, more in-service training, more time for more contact with their colleagues, etc. Table 10 presents a frequency distribution of the responses by sectional variable, by year of institute, and by system. Three variables stand out as far as their comparative number of references made to them is concerned: resources, with emphasis on the need for more released time and heavier funding for professional development; dissemination of information; and designation of a responsible agent to monitor the articulation process. This last variable was not included in any of the objective sections of the questionnaire and constitutes an important addition to the information derived from the study.

Table 10

Frequency of Reference in Section XII
to Articulation Variables

(By Section, System, & Institute: C.C.N=39; D.O.E.N=28)

SECTION	C.C. Art. I	D.O.E. Art. I	C.C. Art. II	D.O.E. Art. II	C.C. Art. III	D.O.E. Art. III	Total
I. Horizontal Standardization	6	1	1	0	1	0	9
IA. Vertical Standardization	0	2	1	0	1	0	4
II. Dissemination of Information	1	2	3	2	4	2	14
III. In-Service Training	0	0	0	2	0	3	5
IV. Vocational Guidance	0	1	0	1	0	0	2
V. Resources	1	6	0	5	2	7	21
VI. Advanced Placement	0	0	0	0	0	0	0
VII. Program Development	0	0	0	2	0	1	3
VIII. State-Wide Committees	0	0	0	0	0	0	0
IX. Teacher Input	1	0	0	1	0	3	5
X. Student Options	0	1	2	0	1	0	4
XI. Advisory Committees	0	0	0	0	0	2	2
RESPONSIBLE AGENT*	5	2	5	0	5	2	19

*Not included as Questionnaire Section

Results - Personal Interviews

1. D.O.E. Administrators.

The D.O.E. administrators (District Superintendents, Program Specialists from the State Office, and District Curriculum Specialists) with whom I met demonstrated knowledge of and interest in the problems of horizontal and vertical articulation but no apprehension over the possibility of those problems engulfing the D.O.E. They expressed the belief that their own well developed system has met the needs of horizontal articulation and that horizontal articulation in the D.O.E. presents a problem mainly when the facilities or programs of one school are not duplicated in another. They are positive in their attitudes about the present and future state of articulation with the community colleges and many have close coordination with the community colleges in the arrangement for early admissions, counselor visits, and vocational educational workshops for D.O.E. teachers.

The strong movement within the Vocational-Technical Education Section of the D.O.E. towards an even greater course definition by performance objectives (such as that represented in the recently published Instructional Guide for Power and Automotive Occupational Programs under the leadership of Dr. Lawrence Inaba, D.O.E. Program Specialist for Industrial-Technical Education) should provide an even more solid base of lateral transfer and for future vertical transfer as the community colleges themselves move in this same behaviorally defined direction for course development. Almost without exception there was extensive collaboration between the D.O.E. districts and the community colleges, and the mood at least is that this collaboration will increase rather than diminish. Where such collaboration does not exist, it should be encouraged and developed.

2. The Community College Administrators.

Although perhaps not quite so satisfied about the state of articulation as their D.O.E. colleagues, community college administrators are generally positive in their assessment of the current condition of vertical and horizontal articulation. Without exception these administrators (Provosts, Deans of Instruction, Deans of Students, Registrars, and Department Chairmen) believe that in practically all cases the needs of their transfer students from whatever direction are being met--that the students are being afforded every opportunity for expedited progression through the University of Hawaii system in pursuit of their educational and vocational objectives. There were at times suggestions of professional concern over the fact that standardization of certain courses was not so complete as it should be, but the countering antidote consisted of two parts:

a. "We articulate in spite of the absence of a perfectly standardized program."

b. "We are moving constantly in the direction of greater standardization especially where it is most needed--at the elementary level courses."

No one anticipates a rigid, lock-step standardization for the community college curricula, and it would be a mistake to think in terms of such a goal.

3. The D.O.E. Participants.

Interviews with the D.O.E. participants tended to confirm the satisfaction they expressed with vertical and horizontal articulation in their questionnaires. With only one exception, the participants gave high evaluation ratings to what had been accomplished at the three articulation institutes. Many had never had the opportunity to meet their community college colleagues, and they indicated that the chance to know them both personally and professionally was one of the major gains of the institutes. As one teacher stated about the new relationships:

> Now, if I have a question or a problem about my course or one about the community college program, I just get on the phone and we talk it over.

Two slight problems emerged from the interviews. One concerned the brighter, more highly motivated student who carried superior skills with him from his high school vocational courses to his community college courses. These skills oftentimes had been developed in part outside the classroom setting because of the student's personal interest, but the fact is the abilities are there. While such a problem would seem at first hand to be susceptible to solution through advanced placement, teachers who introduced the problem also explained that the student's skills might have developed in only one facet of a total course. Because of this developmental disparity, they believed it was probably best for the student to take the entire course to develop necessary competencies in all aspects of the course.

A second concern dealt specifically with the failure of some students to program themselves with sufficient math courses at the high school level to meet the requirements of the more advanced community college courses. Teachers commenting on this situation indicated that the students who had encountered this problem nonetheless expressed satisfaction at having waited for community college entrance to take the math even though it meant delay in taking a particular course. If the students' educational needs are best met in this fashion, perhaps they

should not be pressed to take courses for which they feel no great readiness, but certainly they should receive counseling on what bearing their high school course selection will have on their future course options and program development.

4. The Community College Participants.

In contrast to the confidence expressed by their administrators, many of the participants took a more dubious view of how articulation was proceeding, some to the point of indicating disillusionment in much the same terms as those used in their commentaries submitted under Section XII (Future Facilitation). Some indicated that they had "given up the fight" and believed that the process was essentially a shibboleth whose articulation would never be mastered. Others not only maintained optimism about the eventual success with the articulative process but documented the successes which they had worked for and achieved. These disparate points for view are considered in the final chapter of this study along with other information derived from the personal interviews.

Chapter III. OBSERVATIONS AND RECOMMENDATIONS

All community colleges have evolved essentially the same administrative procedures for handling transfer credit evaluation. The registrar first reviews the transcript, and if he has no doubts, he is also the last person to review it. If he has doubts, the student is directed to the department chairman or if it is a course not even offered within the University of Hawaii System, consultation may be sought with the dean of instruction who in turn, may confer with members of the faculty most knowledgeable in that academic area. The process is a highly flexible team effort, and reportedly it has served its purpose well.

As long as the number of transfer students warranting such special attention is manageable, such a task-force approach is probably operable and perhaps even desirable for the personalized attention it affords the individual student, but if transfers requiring such personalized attention escalate, the current system may prove inoperable.

A January, 1976, analysis by the Management Systems Office of "Transfer Patterns of Students, University of Hawaii System" during the past three fall semesters indicates a sizable increase in the number of transfer students (approximately 16 percent more in 1975 than in 1973 and 1974). If this trend proves to be a persistent one, then it must be met with a more efficient system for transfer articulation. Its present inefficiency represents lost man hours, and few community colleges have staffs or budgets which provide for such a luxury. Efficiency, then, is one of the primary benefits which would be realized from a more precise process of articulation.

A second major reason for the pursuit of articulation is to protect those students--small or large though their numbers be--who may be losing credit at the time of transfer. The number of such students falling in this category has never been determined. Often it is necessary for the student to take the initiative in requesting credit by examination or credit evaluation, and either time limitations, the bureaucratic structure of an institution new to him, or personality factors--the silent majority--may produce the student's decision to "just let it go." It would appear that the number who fall into this group are relatively small; in not one of the personal interview at any level or within either system did anyone mention a specific case of a student who had lost credit in transferring, and given the high degree of informality and cordiality that exists on most community college campuses, some feedback to teachers or administration from students confronting such problems would be forthcoming.

The sense of agitation and dissatisfaction evinced by a number of the participants does not seem to stem from the problems of articulation so much as from the failure to see more progress in the implementation of the recommendations which they had made for better articulation. There is a major difference between these two potential sources of disenchantment. The first would grow out of a concern for the problems caused by inadequate articulation, e.g., the number of students who were losing credits, duplicating courses, or otherwise losing academic impetus.

This, however, was not the thrust of their complaints. Their complaints seem rather to stem from the fact that as interested and dedicated teachers they had given their time, energy and talents to effect a beneficial change in what was marked off as an area of important academic concern--and then little happened as a result of their efforts to the best of their knowledge.

What they failed to remember, of course, and what should have been impressed upon them, was that such large adaptive processes as those introduced and undertaken through the Articulation Institutes require substantial time for implementation. Had a realistic timetable been presented to the participants at the institutes, and had some kind of information been presented to them following their institute meetings, the sense of dissatisfaction on the part of many would probably never have risen to its present level. Given the scope of the undertaking and some of the kinds of problems with which it labored, articulation progress has been extensive. What was lacking was regular feedback to the participants about the direction, extent and future of that progress with those problems.

As noted above, problems of considerable magnitude are involved in a project involving not only the articulation of the community colleges with the D.O.E. but also involving coordinated efforts between the seven community colleges, three of which did not even share geographical let alone complete program contiguity. The recognition of these peculiar problems facing Hawaii community colleges vis a vis articulation was not limited to the community of professional educators. House Resolution 90 (Appendix F) (although never passed) indicated keen awareness of the problems as well as some of their potential sources. One of these major sources derived from the administrative structure of the community colleges. The resolution referred to the inability of the community colleges "to react in an effective and unified manner" and of "the highly autonomous nature of the community colleges." As the Institute participants pointed out in their commentaries in Section XII of the questionnaire, and as they reiterated along with many members of the administrative staff in the personal interviews, no agent was ever charged with the accountability for implementation of the complicated processes leading to greater horizontal and vertical articulation nor was an agent ever given the authority which would make that accountability a realistic charge. Since the formulation of House Resolution 90, the creation of a new office--Chancellor for Community Colleges--has provided the community college system with an executive officer who--with the powers of the office--can accept accountability for projects and programs requiring the interaction and coordination of the individual community colleges.

Another important personnel appointment to help deal with the continuing implementation of the articulation process has recently (December, 1975) been made by the Office of the Chancellor itself. The appointment is to the position of Curriculum Specialist for Vocational Education programs. Among the responsibilities of the position cited in the job description is "be responsible for encouraging articulation

in the area of vocational education and identification of needed courses and program." (Job announcement, Honolulu Star Bulletin, October 6, 1975).

In addition, the Office of the State Director for Vocational Education is currently searching for a Coordinator of Planning and Evaluation, a position which along with the two key offices mentioned above could ensure the continuing implementation of the articulation process.

Much progress has already been made through the efforts of the Office of the State Director for Vocational Education, the administrators of the community colleges and the D.O.E., as well as the participants of the three Articulation Institutes. If the time required to effect the progress seems lengthy, it is only because the process is a highly complicated one that involves a multitude of complex variables, including the human factor. That over 200 participants from the secondary schools and community colleges from four different islands were brought together over a period of three years to discuss the multiple problems of horizontal and vertical articulation is suggestive of only one aspect of planning carried out by the Office of the State Director for Vocational Education in cooperation with the community colleges and the D.O.E.

As the recommendations emerged from the three institutes and from Boggs' follow-up study I, the Office of the State Director for Vocational Education through the leadership of the Executive Committee to the EPDA Project developed a program to meet the needs required for further articulation. Basic to one portion of the program was the concern for the provision of skills for community college vocational teachers which would enable them to develop and define their courses on the basis of performance-based objectives. As a first step, a workshop led by Robert F. Mager dealing with the theory and practice of performance-based objectives in vocational education was offered in the summer of 1975 to approximately 30 community college participants.

On the basis of the participants' positive evaluation of the workshop, the following program was devised to supplement the impact of the Mager workshop. The program consisted of two parts:

1. A pair of credit courses (Appendix G) to be offered to community college vocational education instructors throughout the state. One course (Ed CI 588B) concentrates "on job task analysis-based curriculum development and content validation of curriculum"; the second (Ed CI 587B) focuses on "Development of common community college program level performance objectives." Given this preparation, the hope is that vocational educators in the community colleges will have not only a deeper theoretical understanding of the educational implications for course development by performance-based objectives but also the skills necessary to develop their courses along these behavioral lines and so provide a common format for course development and definition that lends itself more readily to the requirements of articulation.

2. The development of draft documents by community college faculty "team leaders" containing job task analysis data for their subject areas and/or recommended common performance objectives for basic courses or content areas. The materials developed by the team leaders are to serve as the basis of discussion by program representatives from all campuses. From this discussion, it is hoped that agreement for each subject area represented can be reached on use of job analysis data and/or common performance objectives for the programs on either a terminal program level, a basic course level, or basic content area level. The documents of these objectives will be submitted to the Chancellor for Community Colleges by summer, 1976.

Considerable productivity has surrounded the efforts of others outside the Office of the State Director for Vocational Education to improve articulation. For example, although the advanced placement program for students may not be highly effective, the early admissions program is. The CC-IRP 83[1] study shows that all community colleges have early admits; the range of admissions varies from a low of 4 at Honolulu Community College to a high of 102 at Leeward Community College. The total number of early admits is 286, and several D.O.E. District Superintendents said the number would be higher if more places were available. The trend is viewed as a healthy one by both systems. Many of these early admits tend to pursue general education rather than vocational courses; nonetheless early admission represents a fine form of vertical articulation. Those that do pursue vocational subjects are usually exceptionally talented students in a technical course or students taking courses in business education.

While there is general agreement between the two systems as far as their attitude towards the healthy state of the early admissions program, the consistency of opinion is not so great in the area of advisory committees. This area should receive high priority as far as its development is concerned, for it would provide both the professional and personal contact between the secondary and community college teachers as well as with interested leaders of the community itself. These three sectors are important for articulation, for professional input and growth, but most importantly they represent three sectors which can strongly affect educational development in Hawaii. An informed public is essential for the support of a state's educational goals, and the advisory committees offer one of the best opportunities to inform Hawaii's citizenry of those goals and to involve them with their acquisition.

Three meetings a year of these committees--at the beginning, middle and end of the school year would seem adequate for determining directions

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[1]CC-IRP 83, "Selected Characteristics Classified and Unclassified (Regular) Students Community Colleges Fall 1975," University of Hawaii, Office of the Chancellor for Community Colleges, Institutional Research Unit, October, 1975.

and assessing progress and also seem realistic in terms of time commitments. When asked why there was no advisory committee or why the one that existed was considered weak, participants indicated that time did not permit such meetings. Another response indicated that when members of the community were invited to join the committee, the teachers felt an obligation to pay for their lunch or dinner when meetings were scheduled around the convenience of eating and meeting at the same time. Neither of these two problems-time nor money--seems substantial enough to stand in the way of the multiple benefits which can be derived from the formation of strong advisory committees. Additionally, when the advisory committee is of an executive nature with the provost as member, it would be advantageous to have the D.O.E. district superintendent on that committee as well, as is being done currently at some institutions.

On the outer islands, both Kauai and Hawaii Community Colleges have well developed advisory committees which are apparently serving the needs of the community well. Perhaps because of these committees, perhaps because of the relatively small size of the communities of which they are a part, community college teachers on Kauai and Hawaii seemed especially well informed about what their D.O.E. counterparts were doing and vice versa. Both colleges--along with Maui--had already put into effect placement by certification in typing and shorhand, which Hawaii had initiated. This procedure had resulted in advanced placement for ten students at Kauai Commnnity College in September, and only one of the ten returned to a more elementary course. The successful results of this advanced placement by certification suggest that while the students may be reluctant to pursue advanced placement by examination, they are ready to accept the opportunity to enter upper level courses, and they can meet the performance criteria of those courses when the criteria have been established.

On Oahu, Honolulu and Kapiolani Community Colleges have exceptionally strong advisory committee programs--as does Leeward in spite of the fact that it has a limited vocational technical department compared to Honolulu and Kapiolani. In cases where college programs are directly related to and influenced by larger organizations from the community (e.g., in the case of union and management affiliations with the apprentice programs or the nursing curriculum's close relationship with the State Board of Nursing), advisory committees are especially strong and the curriculum itself well regulated and developed. The biggest danger in this situation lies in the tendencies of the community colleges to focus their attention on trade and industry and to overlook the inclusion of D.O.E. representatives. This is a tendency which should be examined by the colleges and--where it exists--corrected.

A noteworthy example of the inclusion of D.O.E. personnel on advisory committees is presented in Appendices H and I, which present two stages by the Carpentry Department of Honolulu Community College in collaboration with the D.O.E. to continue developing its articulation goals. The efforts exerted, the coordination developed, and the results attained by this department provide a strong model for other departments to follow.

While Honolulu's Carpentry Department model is exemplary, the department is not alone in assuming an aggressive, initiative stance in confronting the problems of articulation. Appendices J, K, and L present evidence of other departments and individuals who have taken positive action towards articulation implementation. A final inclusion (Appendix M) demonstrates a wide-spread application of the philosophy of articulation in contrast to the other specific, more curricula-related applications.

There are problems that exist and will continue to exist. Some of these bear directly upon future implementation of the articulation process, some are tangential to it. Some are relatively minor, such as the different philosophical orientations and the resulting practical emphases which one department in one college may give in contrast to another. Others are of a more serious nature, the resolution of which go beyond the limits of mere educational philosophy. For example, one of the stated goals of articulation is

> To insure that Vocational Education curricula will be designed so that work at lower levels adequately prepares the individual [student] for higher levels, eliminating unnecessary repetition and providing maximum options for continuing education and transfer to other campuses. [State Master Plan for Vocational Education, State of Hawaii (Revised 1974, p. 6)]

The goal is a laudatory one, and while educators may design their curriculum and teachers may teach it in such a way as to meet that objective, it avails little if there are no openings for the students to fill. Last September there were 136 applicants for the automotive mechanics course at Honolulu Community College. Only 63 were accepted, and there are other programs that face similar physical limitations as far as accommodating the number of applicants. Nor is it a matter of simply providing more teachers and more facilities, although in the case cited at Honolulu Community College, forthcoming facilities will help to alleviate a part of the problem. Rather, it is a matter of employment for the graduate, a matter central to the raison d'etre of vocational education but one which falls outside its direct control.

Another problem of less state-wide concern but of major importance for articulation is reflected in the recently published "Course Equivalencies in Vocational Education: Community Colleges, Fall 1975." [CC-IRP 85]. A brief review of the report will suggest the work that has yet to be done in the area of course standardization, although with a copy of the report on their desks, the registrars of the community colleges will have more collated references on course equivalencies than they have ever had before. The problem here lies not in the several unique programs which many of the community college campuses carry, but in the lack of standardization to the more basic, introductory courses, for those are the courses most frequently involved in transfer credit or course duplication.

One administrative irregularity at Hawaii Community College, which might or might not create an articulation problem, is created by the fact that the registrar of Hilo College evaluates the transcripts of the students entering the community college. With over fifty students from the other islands transferring into Hawaii Community College, it could be that the community college itself is in a better position to evaluate the transcript and provide guidance and academic integration for the transfer.

The clamor for more workshops and more in-service training programs represents a healthy, professional attitude on the part of the faculty members. The Office of the State Director for Vocational Education has arranged a variety of in-service training programs during the summer and the academic year both on Oahu and the outer islands ranging over such general and specific areas as auto mechanics, carpentry, vocational guidance, reading skills, techniques for individualized instruction, etc. These programs provide much needed opportunities for professional development. Such efforts represent a pattern which should be continued and developed to meet the immediate as well as the long range needs and objectives of the vocational programs.

Of major importance is the discovery of a solution to the problem of information dissemination. A variety of possibilities already exists in the form of such publications as the "Community College Bulletin," the college catalogues and student newspapers. Short notices about developments relating to articulation in the Chancellor's office or in the plans of the Office of the State Director for Vocational Education as well as those developments initiated by departments and individuals would do much to create an informed and satisfied teaching staff. The information exists as do the potential channels; what must be developed are systematic procedures that will insure the regular flow of information to administrators, counselors, teachers, and students alike.

Finally, the goal of more perfect articulation is not so distant, for the assumption that "articulation"--either horizontal or vertical--be equated with "innovation" in the D.O.E. and community college systems would be an erroneous one. There is a great deal of academic articulation which exists and has existed because of the efforts of many dedicated teachers and administrators. That the process can be made easier and more effective for them and for their students should be incentive enough for continuing leadership to carry through the coming final stages.

Annotated List of Tables

AN ANNOTATED LIST OF THE TABLES

(Please refer to "Glossary of Terms" if necessary)

Table 1 (p. 50) shows the number of questionnaires distributed to and returned by D.O.E. and community college participants from each of the vocational areas represented at each of the three articulation institutes. It also shows the percentage of return from each group.

Table 2 (p. 51) summarizes by systems the total number of questionnaires distributed to and returned by the participants according to the year of their participation as well as by totals for the three institutes. Percentage of return is also indicated.

Table 3 (p. 52) indicates the number of <u>possible</u> responses which could be made to each objective section of the questionnaire as well as the <u>actual</u> number made. Areas of primary concern, interest, or knowledgeability may be reflected in the percentage of responses made to a section by the participants.

For example, while both community college and D.O.E. participants responded in almost equal percentages to Sections I, IA, III, V, VII, VIII, and X, there was considerable disparity in the percentage of their responses to the other sections. Community college respondents had higher response ratios to the following sections:

II. Dissemination of Information (70% cf. 55%)
VI. Advanced Placement (76% cf. 42%)
XI. Advisory Committees (92% cf. 63%)

D.O.E. respondents had higher response ratios to:

IV. Vocational Guidance (A. By teachers: 87% cf. 68%)
(B. By counselors: 82% cf. 60%)
IX. Teacher Input (87% cf. 56%)

Table 4 (p.) indicates <u>for each system</u> and <u>for each item</u>:

1) the number (N) of respondents;
2) the mean (M) score; and
3) the standard deviation (SD).

Given the 4.00 rating scale that the questionnaire utilizes, a <u>higher</u> mean suggests higher satisfaction with the item and vice versa. A <u>lower</u> standard deviation, on the other hand, suggests greater agreement on the part of the respondents as to where that mean should fall on the scale. (Note "Glossary"). Table 4 is of special importance to this report because of its comprehensive nature. It provides the average rating and the average standard deviation for each item for either community college or D.O.E. respondents.

Table 5 derives directly from Table 4. Table 5 groups the items from each section rated highest and lowest. Those items with the higher rating values are grouped under "Upper Limits"; those of lower ratings under "Lower Limits." Table 5 is presented within the text of the study.

Table 6 (p. 59) presents the same data as Table 5 but in a format which lends itself to readier examination of the data.

Table 7 (p. 61) provides a total average (mean) of the ratings and standard deviations for the total number of items in each section by system. These figures were obtained by adding up the item ratings and standard deviations of each section as reported in Table 4 and then dividing those totals by the number of items in the section. Table 7 provides a convenient means of determining the average rating values and standard deviations for each section and each system.

Table 8 (p. 62) presents the average rating values and the standard deviations of those scores for each vocational area for each year of the institutes, each system, and each section. The item evaluation scores of each respondent within a vocational area were totaled and that total was divided by the number of respondents. Although the number of respondents is low in several of the vocational areas, because of the number of variables included, Table 8 provides a comparative summary of many factors pertinent to articulation as viewed by the respondents in their roles as community college or D.O.E. vocational instructors. (Note pp. 49-51).

Table 9 (p. 67) derives from Table 8. Table 9 presents for each vocational area a total average evaluation score and its standard deviation for the combined eleven objective sections of the questionnaire. These figures were obtained by adding up the ratings and standard deviations of each section of each vocational area and then dividing by the number of sections. Table 9 is similar to Table 7 in this condensation of data. While Table 7 provides total averages by item however, Table 9 provides total averages of the vocational areas.

Table 10 (p. 36) shows the number of references made (by Section, System, and Institute) to the sectional subject categories of the Questionnaire by the respondents in open-ended Section XII.

Table 1. Distribution & Return of Articulation Questionnaires

Institute	Subject Area	System	Distributed	Returned	% of Return
I. (1972-73)	Drafting	CC	7	5	71
		DOE	5	3	60
	Business Ed. (Typing/Shorthand)	CC	7	2	29
		DOE	8	2	25
	Food Services	CC	6	1	16
		DOE	3	2	67
	Automotive Mechanics	CC	17	10	59
		DOE	7	3	43
II. (1973-74)	Business Ed. (Data Proc. & Acctg.)	CC	20	12	60
		DOE	11	9	82
	Health Occupations	CC	13	2	15
		DOE	3	2	67
	Electricity	CC	4	1	25
		DOE	2	1	50
	Electronics	CC	1	0	0
		DOE	6	4	67
III. (1974-75)	Agriculture	CC	1	1	100
		DOE	10	6	60
	Distributive Education	CC	6	2	33
		DOE	13	5	38
	Carpentry	CC	13	8	62
		DOE	8	6	67
	Auto Body Repair & Painting	CC	6	5	84
		DOE	8	3	38
	*Unspecified	CC	8	8	-
		DOE	3	3	-

*These questionnaires did not specify subject area.

Table 2. Totals: Distribution & Return of Articulation Questionnaires by System & by Articulation Institute

	System	Distributed	Returned	% of Return
Art. I (1972-1973)	CC	37	18	49
	DOE	23	10	43
Art. II (1973-1974)	CC	38	15	40
	DOE	22	16	43
Art. III (1974-1975)	CC	26	16	62
	DOE	39	20	51
Subtotal	CC	101	49	49
	DOE	84	46	55
*Unspecified	CC	8	8	-
	DOE	3	3	-
Grand Total	CC	109	57	52
	DOE	87	49	56
Combined Total		196	106	54

*These questionnaires did not specify subject area.

Table 3. Analysis of Number & Percentage of Responses
(Sections I-XI) by Section and System
[CC Respondent - N=57]
[DOE Respondent - N=49]

Section	Items per Section	Responses: Com. Col.	Responses: DOE	Total Possible CC Response	% of Total CC Response	Total Possible DOE Response	% of Total DOE Response
I. Horizontal Standardization	16	726	608	912	80	784	78
IA. Vertical Standardization	16	646	561	912	71	784	72
II. Dissemination of Information	5	200	135	285	70	245	55
III. In-Service Training	7	318	294	399	80	343	86
IV. Voc. Guidance (Teachers)	4	154	171	228	68	196	87
IV. Voc. Guidance (Counselors)	4	137	160	228	60	196	82
V. Resources	5	277	237	285	97	245	97
VI. Advanced Placement	5	216	103	285	76	245	42
VII. Prog. Devel.	5	240	199	285	84	245	81
VIII. State-Wide Committees	5	226	206	285	79	245	84
IX. Teacher Input	3	95	128	171	56	147	87
X. Student Options	7	241	197	399	60	343	57
XI. Advisory Comm.	4	210	123	328	92	196	63
TOTALS	86	3,686	3,122	4,902	75%	4,214	74%

Table 4. Item Analysis of Questionnaire Section I-XI (Means & Standard Deviations of Response Totals (N) by Item & by System)

Section I. Horizontal Standardization

Item	System	N	M	SD
A	CC	50	2.54	.99
A	DOE	42	2.79	.84
B	CC	50	2.58	1.02
B	DOE	42	2.71	.92
C	CC	49	2.37	1.40
C	DOE	41	2.78	.96
D	CC	53	1.98	1.10
D	DOE	50	2.43	.93
E	CC	47	2.34	.92
E	DOE	40	2.63	.95
F	CC	46	2.28	.98
F	DOE	38	2.50	1.36
G	CC	47	2.09	1.02
G	DOE	38	2.61	.95
H	CC	48	2.27	1.01
H	DOE	39	2.54	1.35

Item	System	N	M	SD
I	CC	48	1.77	.90
I	DOE	35	2.00	.97
J	CC	43	2.00	.93
J	DOE	36	1.91	.78
K	CC	45	2.02	.84
K	DOE	37	2.00	.78
L	CC	46	2.09	.92
L	DOE	37	2.06	.86
M	CC	46	2.13	.83
M	DOE	36	2.09	.82
N	CC	46	2.33	.87
N	DOE	36	2.19	.77
O	CC	44	2.27	.95
O	DOE	35	2.27	.64
P	CC	25	1.92	.86
P	DOE	36	2.28	.99

Section IA. Vertical Standardization

Item	System	N	M	SD
A	CC	46	2.28	.96
A	DOE	40	2.43	.90
B	CC	46	2.20	.86
B	DOE	39	2.41	.88
C	CC	43	2.09	.78
C	DOE	38	2.34	.94
D	CC	39	1.74	.85
D	DOE	35	2.17	.86
E	CC	42	1.93	.89
E	DOE	35	2.29	.83
F	CC	43	1.93	.94
F	DOE	37	2.38	.98
G	CC	38	1.82	.83
G	DOE	36	2.06	1.36
H	CC	42	1.95	1.08
H	DOE	36	2.19	.89

Item	System	N	M	SD
I	CC	36	1.53	1.28
I	DOE	31	2.00	.97
J	CC	35	1.54	.66
J	DOE	32	1.91	.78
K	CC	41	1.85	.91
K	DOE	34	2.00	.78
L	CC	40	1.78	.97
L	DOE	33	2.06	.86
M	CC	30	1.87	1.61
M	DOE	33	2.09	.82
N	CC	41	1.90	.77
N	DOE	36	2.19	.77
O	CC	40	2.13	1.11
O	DOE	34	2.27	.64
P	CC	25	1.76	.72
P	DOE	32	2.28	.99

	II. Dissemination of Information				III. In-Service Training				IV. Vocational Guidance			
Respon-dents	Item	N	M	SD	Item	N	M	SD	Item	N	M	SD
CC	A	44	2.00	.86	A	46	2.17	.93	A	38	2.55	.76
DOE	A	40	2.35	1.00	A	46	2.59	.96	A	47	2.79	.81
CC	B	43	1.49	.70	B	44	2.02	1.38	B	40	2.45	.88
DOE	B	15	2.13	.99	B	42	1.88	.90	B	45	2.62	.81
CC	C	26	1.50	.65	C	49	1.81	.91	C	36	1.86	.80
DOE	C	37	2.49	.96	C	44	2.07	1.09	C	39	1.92	.84
CC	D	48	2.48	1.17	D	44	1.30	.80	D	40	2.28	1.04
DOE	D	12	2.08	1.00	D	36	1.61	.90	D	40	2.04	.88
									IN WHAT OTHER WAYS			
CC	E	39	1.64	.84	E	46	1.91	.84	A	35	2.23	.81
DOE	E	31	1.77	.85	E	42	2.12	.94	A	42	2.24	.85
CC					F	45	2.11	1.07	B	35	2.17	.82
DOE					F	43	2.09	1.00	B	42	2.21	.78
CC					G	44	1.68	.74	C	33	1.91	.81
DOE					G	41	2.07	1.35	C	38	2.11	1.13
CC									D	34	2.32	.98
DOE									D	38	2.13	.84

	V. Resources				VI. Advanced Placement				VII. Program Development			
Respon-dents	Item	N	M	SD	Item	N	M	SD	Item	N	M	SD
CC	A	51	2.59	1.06	A	41	1.76	.86	A	49	2.12	.86
DOE	A	41	2.42	1.02	A	21	1.95	.67	A	40	1.93	.92
CC	B	53	2.49	1.01	B	39	1.38	.63	B	48	2.29	.97
DOE	B	41	2.56	1.03	B	18	1.61	.70	B	41	2.27	.98
CC	C	45	1.80	1.06	C	47	2.02	1.07	C	47	2.26	.99
DOE	C	34	1.91	1.00	C	21	1.95	.87	C	40	2.40	.84
CC	D	42	1.81	.80	D	48	1.75	.93	D	48	2.60	1.51
DOE	D	35	1.83	1.01	D	23	2.13	1.14	D	39	2.33	.90
CC	E	46	1.83	.82	E	41	1.59	.81	E	48	2.00	.95
DOE	E	38	2.16	.95	E	20	1.95	1.00	E	39	2.10	1.02

	VIII. State-Wide Committees				IX. Teacher Input				X. Student Options			
Respondents	Item	N	M	SD	Item	N	M	SD	Item	N	M	SD
CC	A	45	1.60	.81	A	20	1.80	.95	A	41	2.32	.99
DOE	A	42	1.91	1.09	A	43	2.40	1.09	A	32	2.41	.95
CC	B	46	1.58	.84	B	37	2.30	.85	B	39	2.23	1.01
DOE	B	41	2.05	1.09	B	42	2.31	1.16	B	34	2.65	1.38
CC	C	44	1.73	.87	C	38	2.32	.81	C	14	2.64	1.15
DOE	C	41	2.02	1.07	C	43	2.05	1.00	C	18	2.39	1.48
CC	D	45	1.69	.87					D	31	1.77	.72
DOE	D	41	2.02	1.01					D	25	2.36	1.32
CC	E	46	1.63	.85					E	37	2.22	.85
DOE	E	41	1.95	.92					E	27	2.26	1.29
CC									F	38	2.11	.95
DOE									F	31	2.29	.78
CC									G	41	2.20	1.01
DOE									G	30	2.23	.73

XI. Advisory Committees

Respondents	Item	N	M	SD
CC	A	52	2.83	.92
DOE	A	32	2.28	1.39
CC	B	52	2.67	.88
DOE	B	31	2.39	1.05
CC	C	52	2.94	.87
DOE	C	30	2.27	1.05
CC	D	54	2.44	1.09
DOE	D	30	2.27	1.14

Table 6. Range of Mean and Standard Deviation Responses: Upper and Lower Limits (By Item and by System: Cf. Table 4)

SECTION (Parentheses indicate # of Items in Section)	Item	M CC Upper	SD CC Upper	Item	M DOE Upper	SD DOE Upper	Item	M CC Lower	SD CC Lower	Item	M DOE Lower	SD DOE Lower
I. Horizontal Standardization (16)	B	2.58	1.02	A	2.79	.84	I	1.77	.90	J	1.97	1.22
	A	2.54	.99	C	2.78	.96	P	1.92	.86	O	2.20	.90
	C	2.37	.96	B	2.71	.92	D	1.98	1.10	K	2.27	.61
IA. Vertical Standardization (16)	A	2.28	.96	A	2.43	.90	I	1.53	1.48	J	1.91	.78
	B	2.20	.86	B	2.41	.88	J	1.54	.66	K	2.00	.78
	O	2.13	1.11	F	2.38	.98	D	1.74	.85	I	2.00	.97
II. Dissemination of Information (5)	D	2.48	1.17	C	2.49	.96	B	1.49	.70	E	1.77	.85
	A	2.00	.86	A	2.35	1.00	C	1.50	.65	D	2.08	1.00
							E	1.64	.84	B	2.13	.99
III. In-Service Training (7)	A	2.17	.93	A	2.59	.96	D	1.30	.80	D	1.61	.90
	F	2.11	1.07	E	2.12	.94	G	1.68	.74	B	1.88	.90
IV. Vocational Guidance: Teachers (4)	A	2.55	.76	A	2.79	.81	C	1.86	.80	C	1.92	.84
IV. Voc. Guidance: Counselors (4)	D	2.32	.98	A	2.24	.85	C	1.91	.81	C	2.11	1.13

SECTION (Parentheses indicate # of Items in Section)	Item	M CC Upper	SD CC Upper	Item	M DOE Upper	SD DOE Upper	Item	M CC Lower	SD CC Lower	Item	M DOE Lower	SD DOE Lower
V. Resources (5)	A	2.59	1.06	B	2.56	1.02	C	1.80	1.06	D	1.83	1.01
	B	2.49	1.01	A	2.42	1.03	D	1.81	.80	C	1.91	1.00
							E	1.83	.82	E	1.95	.95
VI. Advanced Placement (5)	C	2.02	1.07	D	2.13	1.14	B	1.38	.63	B	1.61	.70
							E	1.59	.81	E	1.95	1.00
							D	1.75	.93	A	1.95	.67
							A	1.76	.86	C	1.95	.87
VII. Program Development (5)	D	2.60	1.51	C	2.40	.84	E	2.00	.95	A	1.93	.92
VIII. Statewide Committees (5)	C	1.73	.87	B	2.05	1.09	B	1.58	.84	A	1.91	1.09
	D	1.69	.87	D	2.02	1.01	A	1.60	.81	E	1.95	.92
							E	1.63	.85	C	2.02	1.07
IX. Teacher Input (3)	C	2.32	.81	A	2.40	1.09	A	1.80	.95	C	2.05	1.00
	B	2.30	.85	B	2.31	1.16						
X. Student Options (7)	C	2.64	1.15	B	2.65	1.38	D	1.77	.72	C	2.23	.73
	A	2.32	.99	A	2.41	.95						
XI. Advisory Committees (4)	C	2.94	.87	B	2.39	1.05	D	2.44	1.09	D	2.27	1.14
	A	2.83	.92	A	2.28	1.39	B	2.67	.88	C	2.27	1.05

Table 7. Mean of Means and Mean of Standard Deviations of Item (Table 4) By System and by Section [Community College N=52; DOE N=49]

SECTION	Respondent	Item M	Item SD
I. Horizontal Standardization	CC	2.19	.97
	DOE	2.48	.99
IA. Vertical Standardization	CC	1.89	.96
	DOE	2.19	.89
II. Dissemination of Information	CC	1.82	.84
	DOE	2.16	.96
III. In-Service Training	CC	1.86	.95
	DOE	2.06	1.02
IV. Vocational Guidance (Teachers)	CC	2.29	.86
	DOE	2.34	.87
IV. Vocational Guidance (Counselors)	CC	2.16	.94
	DOE	2.17	.89
V. Resources	CC	2.10	.95
	DOE	2.17	1.00
VI. Advanced Placement	CC	1.69	.86
	DOE	1.92	.88
VII. Program Development	CC	2.25	1.06
	DOE	2.21	.92
VIII. State-Wide Committees	CC	1.65	.85
	DOE	1.99	1.04
IX. Teacher Input	CC	2.14	.87
	DOE	2.25	1.08
X. Student Options	CC	2.21	.95
	DOE	2.37	1.13
XI. Advisory Committees	CC	2.72	.94
	DOE	2.30	1.16

Table 8. Mean of Means (and their Standard Deviations) by Subject Area, by Section, by System and by Institute. (N.B. Table 8 presents the Community College Respondents' scores first for each subject area and then the DOE scores immediately below. DOE scores coincide with the ditto marks to permit easier scanning.)

SECTIONS:	I. Horizontal Standardization (16 Items)				IA. Vertical Standardization (16 Items)				II. Dissemination of Information (5 Items)			
Subject Areas Institute I	# of Respondent	# of Responses	M of Responses	S.D. of Responses	# of Respondent	# of Responses	M of Responses	S.D. of Responses	# of Respondent	# of Responses	M of Responses	S.D. of Responses
Bus. Ed. (Typing/Shorthand)	2	37	1.19	.40	2	31	1.23	.50	2	7	1.14	.42
" " "	2	17	2.83	.41	2	8	3.00	0.00	2	3	2.67	.33
Auto Mechanics	7	107	2.62	.98	7	94	2.18	1.20	7	32	2.00	1.33
" "	3	41	2.27	.81	3	32	1.78	1.08	3	7	2.14	.69
Drafting	4	61	1.97	.80	4	61	1.66	.83	4	16	1.56	.73
"	3	40	2.95	1.08	3	32	1.88	1.47	3	7	2.00	1.15
Food Services	1	16	2.19	1.40	1	15	1.60	.91	1	4	3.25	1.50
" "	2	16	2.94	1.21	2	13	2.23	.60	2	4	2.00	.82
Institute II												
Bus. Ed. (Data Processing	11	161	1.83	1.03	11	140	1.67	.79	11	40	1.50	.75
" " & Accounting)	9	133	2.41	1.42	9	102	2.09	1.44	9	22	1.73	1.33
Electricity	1	16	1.44	.51	1	16	1.38	.50	1	3	1.00	0.00
"	1	16	2.94	.68	1	16	2.88	.62	1	2	2.50	2.12
Electronics	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.
"	4	45	2.24	1.49	4	58	2.31	1.20	4	37	2.07	1.38
Health Occupations	3	18	2.50	1.18	3	17	1.05	1.03	3	12	2.08	1.08
" "	2	32	2.69	1.19	2	31	2.68	.54	2	9	2.56	.73
Institute III												
Carpentry	8	123	2.55	1.02	8	112	2.04	.73	8	35	2.17	.85
"	5	70	2.64	.84	5	65	2.14	.83	5	20	2.30	.73
Agriculture	1	N.R.	N.R.	N.R.	1	11	2.00	.63	1	3	2.00	1.00
"	6	96	2.36	1.24	6	71	1.86	.66	6	19	2.37	1.16
Auto Body Repair & Painting	5	73	2.73	1.42	5	26	3.19	1.37	5	4	3.75	.50
" " " "	3	48	2.10	1.41	3	48	2.10	1.41	3	11	3.09	1.14
Distributive Education	2	27	2.56	.85	2	16	1.00	0.00	2	9	1.56	.73
" "	6	64	2.52	1.27	6	48	2.31	1.42	6	14	1.64	1.52
UNSPECIFIED	7	82	2.43	1.23	7	89	2.27	1.92	7	32	1.91	1.43
"	3	14	2.43	1.25	3	66	2.87	.87	3	8	1.50	.76

SECTIONS:	III. In-Service Training (7 Items)				IV. Vocational Guidance: Teachers (4 Items)				IV. Vocational Guidance: Counselors (4 Items)			
Subject Areas Institute I	# of Respondent	# of Responses	M of Responses	S.D. of Responses	# of Respondent	# of Responses	M of Responses	S.D. of Responses	# of Respondent	# of Responses	M of Responses	S.D. of Responses
Bus. Ed. (Typing/Shorthand)	2	13	1.69	1.18	2	4	2.00	0.00	2	4	1.50	.33
" " "	2	6	2.83	.41	2	3	3.00	0.00	2	2	1.50	.71
Auto Mechanics	7	47	2.49	1.43	7	25	2.36	.91	7	20	2.60	.50
" "	3	18	3.00	1.26	3	12	2.09	.67	3	12	1.75	.62
Drafting	4	25	1.96	1.27	4	13	2.77	.73	4	13	2.23	.60
"	3	16	1.94	1.26	3	6	2.16	.98	3	6	1.33	.52
Food Services	1	7	2.71	.76	1	4	2.75	1.26	1	4	2.50	1.29
" "	2	14	1.21	1.34	2	8	2.00	1.07	2	8	1.75	.89
Institute II												
Bus. Ed. (Data Processing & Accounting)	11	71	1.41	.65	11	36	2.31	1.04	11	28	1.96	1.44
" " "	9	54	1.72	.96	9	32	2.44	1.40	9	32	2.00	.88
Electricity	1	7	1.00	0.00	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.
"	1	6	1.33	.52	1	4	2.00	.82	N.R.	N.R.	N.R.	N.R.
Electronics	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.
"	4	27	2.07	1.38	4	16	2.06	.77	4	12	2.42	.51
Health Occupations	3	19	1.89	1.32	3	4	2.00	0.00	3	4	1.00	0.00
" "	2	11	2.45	1.04	2	8	2.87	1.25	2	4	2.00	0.00
Institute III												
Carpentry	8	49	2.06	.90	8	28	2.18	.91	8	28	2.14	.76
"	5	30	2.13	.78	5	17	2.29	1.48	5	19	2.16	.90
Agriculture	1	7	1.00	0.00	1	2	1.00	0.00	1	N.R.	N.R.	N.R.
"	6	39	1.44	1.17	6	22	2.45	1.24	6	22	2.41	.59
Auto Body Repair & Painting	5	9	2.78	.44	5	5	2.80	.20	5	4	2.75	.50
" " " "	3	20	3.10	.97	3	12	2.67	.65	3	12	2.17	.83
Distributive Education	2	14	1.57	1.19	2	8	1.50	.76	2	8	1.63	.74
" "	6	40	2.35	1.00	6	23	2.65	1.23	6	23	2.26	.75
UNSPECIFIED	7	48	2.40	1.46	7	25	2.44	.82	7	23	2.30	.93
"	3	19	2.32	1.60	3	7	3.14	.90	3	7	3.28	.76

SECTIONS: / Subject Areas	V. Resources (5 Items)				VI. Advanced Placement (5 Items)				VII. Program Development (5 Items)			
Institute I	# of Respondent	# of Responses	M of Responses	S.D. of Responses	# of Respondent	# of Responses	M of Responses	S.D. of Responses	# of Respondent	# of Responses	M of Responses	S.D. of Responses
Bus. Ed. (Typing/Shorthand)	2	9	2.11	.93	2	5	2.20	.84	2	10	2.20	.42
" " "	2	2	2.00	0.00	2	1	3.00	0.00	2	5	2.20	.45
Auto Mechanics	7	33	2.39	1.39	7	29	2.07	1.58	7	30	2.57	.73
" "	3	14	1.71	1.30	3	10	1.40	.52	3	15	1.67	.82
Drafting	4	20	1.85	.81	4	20	2.00	.97	4	20	2.30	1.03
"	3	6	2.00	1.55	3	5	1.00	0.00	3	6	1.83	.41
Food Services	1	5	4.00	0.00	1	5	1.00	0.00	1	5	1.00	0.00
" "	2	6	1.83	.98	2	10	2.10	.88	2	10	1.00	0.00
Institute II												
Bus. Ed. (Data Processing & Accounting)	11	49	1.88	.90	11	54	1.41	1.23	11	52	1.96	.95
" " "	9	36	2.03	.97	9	21	1.67	.97	9	30	2.03	.93
Electricity	1	5	1.00	0.00	1	5	1.00	0.00	1	5	1.40	.74
"	1	5	2.00	0.00	1	N.R.	N.R.	N.R.	1	5	1.60	.55
Electronics	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.
"	4	20	2.15	1.04	4	13	2.00	0.00	4	20	2.35	.88
Health Occupations	3	15	1.53	1.30	3	5	1.00	0.00	3	9	1.89	1.27
" "	2	8	2.37	1.06	2	5	1.80	.45	2	10	3.00	1.05
Institute III												
Carpentry	8	38	2.53	.95	8	32	2.56	.72	8	40	2.53	.88
"	5	25	2.28	1.17	5	10	1.50	.53	5	24	2.08	1.46
Agriculture	1	5	1.00	0.00	1	5	1.00	0.00	1	5	1.60	.55
"	6	20	2.45	1.24	6	N.R.	N.R.	N.R.	6	30	2.63	.96
Auto Body Repair & Painting	5	13	3.23	.83	5	15	2.40	1.12	5	22	2.31	.50
" " " "	3	15	2.07	1.53	3	10	2.90	.74	3	15	1.87	.92
Distributive Education	2	10	1.60	.70	2	10	1.50	.85	2	10	1.20	.63
" "	6	25	2.08	1.35	6	16	2.13	.81	6	24	1.91	.88
UNSPECIFIED	7	33	3.33	1.15	7	32	1.66	1.19	7	24	2.00	1.72
"	3	9	2.44	1.13	3	8	3.25	.71	3	10	2.60	.84

SECTIONS:	VIII. State-Wide Committees (5 Items)				IX. Teacher Input (3 Items)				X. Student Options (7 Items)			
Subject Areas	# of Respondent	# of Responses	M of Responses	S.D. of Responses	# of Respondent	# of Responses	M of Responses	S.D. of Responses	# of Respondent	# of Responses	M of Responses	S.D. of Responses
Institute I												
Bus. Ed. (Typing/Shorthand)	2	10	1.10	.32	2	3	2.00	0.00	2	12	1.58	.67
" " "	2	10	1.40	.87	2	6	2.16	.98	2	3	2.67	.58
Auto Mechanics	7	30	1.86	.73	7	16	2.31	.79	7	36	1.97	1.31
" "	3	10	1.20	.42	3	6	1.00	0.00	3	12	1.92	.29
Drafting	4	20	1.60	.82	4	9	2.11	.78	4	23	2.65	1.23
"	3	5	1.00	0.00	3	3	2.00	0.00	3	7	2.43	.53
Food Services	1	5	1.00	0.00	1	2	3.00	0.00	1	6	2.00	1.55
" "	2	10	1.00	0.00	2	5	2.20	.45	2	4	1.25	.50
Institute II												
Bus. Ed. (Data Processing & Accounting)	11	52	1.27	.53	11	20	1.90	.91	11	51	2.61	.96
" " "	9	40	2.25	.90	9	24	1.75	1.28	9	42	2.36	1.40
Electricity	1	5	1.00	0.00	1	2	2.00	0.00	1	6	1.17	.41
"	1	5	1.40	.55	1	3	1.33	1.00	1	N.R.	N.R.	N.R.
Electronics	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.
"	4	20	2.40	1.14	4	12	2.08	1.16	4	6	2.83	.41
Health Occupations	3	15	.80	.68	3	3	1.40	1.15	3	10	1.20	.42
" "	2	10	3.1	.88	2	6	3.00	.89	2	9	2.56	.53
Institute III												
Carpentry	8	40	2.25	.99	8	20	2.15	.88	8	45	2.16	.95
"	5	15	1.73	.70	5	15	2.00	1.08	5	18	2.39	1.22
Agriculture	1	N.R.	N.R.	N.R.	1	2	2.50	.81	1	3	1.00	0.00
"	6	30	2.20	1.13	6	16	3.00	1.48	6	27	2.30	1.41
Auto Body Repair & Painting	5	7	2.00	.25	5	3	2.67	.58	5	6	2.67	.52
" " " "	3	15	2.00	1.46	3	9	3.00	1.50	3	19	2.32	1.49
Distributive Education	2	10	1.30	.67	2	5	1.60	.89	2	12	1.83	1.11
" "	6	25	2.16	.75	6	15	2.73	.80	6	22	2.77	1.21
UNSPECIFIED	7	30	1.70	.75	7	11	2.00	1.34	7	36	2.22	.83
"	3	10	2.00	0.0	3	7	2.29	1.38	3	9	3.00	.87

SECTIONS: XI. Advisory Committees (4 Items)

Subject Areas Institute I	# of Respondent	# of Responses	M of Responses	S.D. of Responses
Bus. Ed. (Typing/Shorthand)	2	8	1.88	.64
" " "	2	N.R.	N.R.	N.R.
Auto Mechanics	7	33	2.61	1.41
" "	3	8	2.37	.74
Drafting	4	16	2.94	1.00
"	3	5	3.4	.80
Food Services	1	4	4.00	0.00
" "	2	8	1.75	.89
Institute II				
Bus. Ed. (Data Processing & Accounting)	11	39	2.69	.82
" " "	9	20	1.65	.88
Electricity	1	4	1.00	0.00
"	1	4	1.00	0.00
Electronics	N.R.	N.R.	N.R.	N.R.
"	4	4	3.00	0.00
Health Occupations	3	12	2.33	.65
" "	2	5	3.40	.89
Institute III				
Carpentry	8	32	2.72	.89
"	5	15	1.87	.90
Agriculture	1	4	2.75	.96
"	6	14	3.14	1.32
Auto Body Repair & Painting	5	20	3.60	.60
" " " "	3	12	2.83	.83
Distributive Education	2	8	2.63	.74
" "	6	12	1.92	1.24
UNSPECIFIED	7	32	2.69	1.24
"	3	4	3.75	.50

Table 9. Ranked Composite Averages of Means and their Standard Deviations from Table 8. [N.B. These figures represent the composite Mean score for the eleven objective Sections of the Questionnaire reported by Subject Area, by System, and by year of Institute.]

Subject Areas	System	# of Respondents	Average M	Rank of M by System	Average SD	Rank of SD by System
Articulation Inst. I						
Business Ed. (Typing/Shorthand)	CC	2	1.68	7	.65	8
	DOE	2	2.44	3	.56	9
Auto Mechanics	CC	7	2.33	3	.76	10
	DOE	3	1.87	11	.53	8
Drafting	CC	4	2.12	5	.44	3
	DOE	3	1.99	9	.68	11
Food Services	CC	1	2.38	2	1.05	11
	DOE	2	1.05	12	.60	10
Articulation Inst. II						
Business Ed. (Data Processing & Accounting)	CC	11	1.88	6	.45	4
	DOE	9	2.01	8	.29	1
Electricity	CC	1	1.22	10	.32	2
	DOE	1	1.90	10	.69	12
Electronics	CC	NR	NR	NR	NR	NR
	DOE	4	2.31	5	.31	3
Health Occupations	CC	3	1.59	(9)	.56	7
	DOE	2	2.65	1	.44	5
Articulation Inst. III						
Carpentry	CC	8	2.34	4	.23	1
	DOE	5	2.12	7	.30	2
Agriculture	CC	1	1.59	(9)	.69	9
	DOE	6	2.38	4	.45	6
Auto Body Repair and Painting	CC	5	2.84	1	.50	6
	DOE	3	2.48	2	.46	7
Distributive Education	CC	2	1.65	8	.47	5
	DOE	6	2.26	6	.35	4

Appendices

October 16, 1975

Dear

During 1972-1975, three Articulation Institutes were held to clarify how greater coordination could facilitate the vertical and horizontal transition of secondary school and community college students in vocational programs. Additionally, in May, 1975, Dr. Minnie Boggs published "A Follow-Up Study of the Implementation of the FY 1973 Articulation Recommendations." In this study, Dr. Boggs not only reviewed to what extent the recommendations of that report had been carried out but also presented further recommendations for future implementation.

The purpose of this present study is to evaluate as accurately as possible the current status of vertical and horizontal articulation in the twelve major areas of vocational education surveyed in the three articulation reports of 1973-75.

While all twelve areas will be reviewed, given the recent date of Dr. Boggs' follow-up study on the FY '73 report as well as the recent (May, 1975) completion of the FY '75 report, primary emphasis will be addressed to the second articulation report, viz., FY 1974. It is hoped that in light of the time which has passed since the original recommendations were made, a more realistic assessment can be made of the:

1. Relative effectiveness of prior recommendations;

2. Unanticipated problems which may have been created in the implementation process; and

3. Potential solutions that may be found for solving new and old problems alike.

As a preliminary part of this assessment, key participants are being asked to respond to the following questionnaire. The responses will be tabulated, organized, and returned to you for your information; they will also provide data for projected interviews and the evaluation report. Since the progress and development of this study depends on questionnaire data, it is exceedingly important that you return the questionnaire in the enclosed envelope by October 31.

Many thanks for your cooperation.

Jack Schlieman
Special Federal Program

JS:di
Attachement

INSTRUCTIONS

ARTICULATION QUESTIONNAIRE

This questionnaire is being sent to all instructor participants in the three vocational education articulation institutes. The purpose is to evaluate the progress made in expediting articulation.

As an institute participant, please answer the questions in terms of the subject area in which you participated. Since the questionnaire covers all twelve articulated areas, some items may not be relevant to your area. However, answer as many as are appropriate to your subject area. If you participated in more than one subject area, please fill out separate questionnaires, one for each area.

The questionnaire ranks the recommendations in terms of frequency of mention by all subject areas. This rank ordering may indicate the relative importance of the recommendations to Institute participants. For example, Item 1 ("Standardization") was the most frequently cited articulation recommendation by all subject areas; followed by Item 2 ("Dissemination of Information"), etc.

Use the following rating to indicate your opinion on articulation progress in your subject area:

4 Excellent, very positive results, great improvement
3 Good, a definite gain, a sizeable improvement
2 "So-so," nothing to get excited about
1 Hardly noteworthy, perhaps a little discouraging

The final item is open-ended and provides the opportunity to introduce factors important to the articulation process which have not been included in the questionnaire. In addition, please feel free to comment on the reverse side of the paper should you wish to clarify or expand any of your numerical responses.

Please check the appropriate spaces. Names are not necessary.

D.O.E. teacher _____ Community College teacher _____

Subject area _____

ARTICULATION QUESTIONNAIRE

I. Standardization:

To what extent have the following aspects of courses been made uniform to facilitate the horizontal transition of students within the secondary schools or the community colleges?

Course Aspect:	Evaluation
A. Content	_____
B. Objectives	_____
C. Philosophy	_____
D. Numbering	_____
E. Description	_____
F. Requirements	_____
G. Credits	_____
H. Titles	_____
I. Total contact hours	_____
J. Scheduling	_____
K. Sequence	_____
L. Orientation (Emphasis)	_____
M. Evaluation	_____
N. Behavioral competencies	_____
O. Transfer mechanics	_____
P. Adherence to D.O.E. State curriculum guides	_____

IA. Standardization:

To what extent have the following aspects of courses been made uniform to facilitate the vertical transition of students between the secondary schools and community colleges?

Course Aspect:	Evaluation
A. Content	_____
B. Objectives	_____
C. Philosophy	_____
D. Numbering	_____
E. Description	_____
F. Requirements	_____
G. Credits	_____
H. Titles	_____
I. Total contact hours	_____
J. Scheduling	_____
K. Sequence	_____
L. Orientation (Emphasis)	_____
M. Evaluation	_____
N. Behavioral competencies	_____
O. Transfer mechanics	_____
P. Adherence to D.O.E. State curriculum guides	_____

II. Dissemination of Information

Has the flow of information increased within the following sectors?

Sectors	Evaluation
A. Between secondary schools and community colleges	_____
B. Between community colleges and the four-year institutions	_____
C. Among secondary schools	_____
D. Among community colleges	_____
E. From a central clearing house to all sectors	_____

III. In-Service Training

To what extent have your opportunities to take in-service training been increased due to programs offered through:

Programs	Evaluation
A. Workshops (utilizing D.O.E. or community college personnel)	_____
B. Seminars	_____
C. Visits to other facilities	_____
D. Teacher exchange	_____
E. University of Hawaii courses	_____
F. Workshops (trade or industry)	_____
G. Appropriate arrangement of time and place	_____

IV. Vocational Guidance

In what ways have students been helped by teachers to understand the options they may exercise to reach their vocational and educational goals?

Area	Evaluation
A. Career guidance	_____
B. Educational planning	_____
C. Advanced placement exams	_____
D. Early admissions to community colleges	_____

In what ways have students been helped by counselors to understand the options they may exercise to reach their vocational and educational goals?

Area	Evaluation
A. Career guidance	_____
B. Educational planning	_____
C. Advanced placement exams	_____
D. Early admissions to community colleges	_____

V. Resources

How well are the following community resources being used to improve learning opportunities for teachers or students?

Resources	Evaluation
Industry	_____
Business	_____
Unions	_____
Government	_____
University of Hawaii	_____

VI. Advanced Placement

To what extent do community college students now seek to avoid duplicating coursework taken in high school by demonstrating their competency through:

Means	Evaluation
A. Written examination	_____
B. Oral examination	_____
C. Performance examination	_____
D. Prior teacher's performance-based recommendation	_____
E. Recommendations (with accompanying job skills) from former employers	_____

VII. Program Development

Is program planning now more adequate and reaslistic with regard to:

Variables	Evaluation
A. Facilities	_____
B. Equipment	_____
C. Program implementation	_____
D. Diversity of student talent	_____
E. Teaching load	_____

VIII. State-Wide Committees

To what extent have state-wide articulation committees been developed for:

	Evaluation
A. Continuous program review	_____
B. Program evaluation	_____
C. Professional improvement	_____
D. Program co-ordination	_____
E. Central information dissemination	_____

IX. Teacher Input

To what extent have opportunities for teacher input been increased in the:

	Evaluation
A. D.O.E. State curriculum guides for vocational subjects	_____
B. Development of course criteria	_____
C. Mechanics and procedures for articulation	_____

X. Student Options

To what extent have the following student options increased?

	Evaluation
A. Early admissions to community colleges	_____
B. Early job entry	_____
C. Typing and shorthand certification	_____
D. Advanced level (more specialized) courses	_____
E. Sequence of courses	_____
F. Easy articulation	_____
G. Easier transfer within a program area	_____

XI. Advisory Committees

How effective has your Advisory Committee been in providing:

Evaluation

A. Guidance in developing or modifying your program _____

B. Professional stimulation _____

C. Information about industry changes and developments _____

D. Meeting ground for community colleges and secondary teachers, and industry representatives _____

XII. Future Facilitation

In this final item, please comment (as briefly or extensively as you wish) on:

A. What major problems remain or have developed which hinder effective articulation? and

B. How might these problems be overcome?

UNIVERSITY OF HAWAII

Board of Regents

April 17, 1974

REPORT OF THE REGENTS' COMMITTEE ON
VOCATIONAL EDUCATION AND COMMUNITY COLLEGE POLICIES

In October 1972, a project entitled "Collaborative Roles and Functions of Occupational Education Programs" was initiated by the office of the State Director for Vocational Education. One of the objectives of this project was to seek ways in which high school programs in auto mechanics, architectural drafting, field services, and office occupations could be interrelated with similar programs in the Community Colleges. Over 180 instructors and administrators from the Department of Education and Community Colleges participated in the project.

The project was completed during the summer of 1973 and copies of the report have been distributed to district superintendents of the Department of Education, provosts of Community Colleges, and other participants. There were no objections to the report. The Coordinating Advisory Council reviewed the report and recommended that the State Board for Vocational Education approve the recommendation noted in the articulation report.

The State Board for Vocational Education, at its meeting of March 14, 1974, accepted the report and commended the participants for the excellent study. Because of policy implications in some of the recommendations, the matter was then referred to the Regents' Committee on Vocational Education and Community College Policies to review and consider specific recommendations noted in the report.

The Committee, upon review of the report, recommends that the University, in consultation with the Department of Education, formulate a task force to follow up on the recommendations within the report and develop plans for implementation which will be submitted to the Regents' Committee on Vocational Education and Community College Policies for its consideration.

Bachman Hall · 2444 Dole Street · Honolulu, Hawaii 96822
An Equal Opportunity Employer

Respectfully submitted,

COMMITTEE ON VOCATIONAL EDUCATION
AND COMMUNITY COLLEGE POLICIES

/s/ Charles S. Ota
Charles S. Ota, Chairman

/s/ Sandra H. Ebesu
Sandra H. Ebesu, Member

/s/ Stuart T. K. Ho
Stuart T. K. Ho, Member

/s/ Harriet Mizuguchi
Harriet Mizuguchi, Member

/s/ Herbert M. Richards, Jr.
Herbert M. Richards, Jr., Member

/s/ Kiyoshi Sasaki
Kiyoshi Sasaki Member

REPORT: ARTICULATION GUIDELINES AND RESPONSIBILITIES DELINEATED BY PROVOSTS

March 14, 1975

The discussion on March 14 resulted in

1. a delineation of basic guidelines on articulation according to which the community colleges hope to operate, and

2. an identification of areas of responsibility of the Provosts, the Office of the Chancellor for Community Colleges, the Office of the State Director for Vocational Education, and the State Board for Vocational Education.

For purposes of definition, it was agreed that articulation refers to a uniformity of understanding rather than standardization of all courses or programs.

The context within which the discussion took place was a classification scheme developed by Ralph Miwa, which addressed itself to the need for arriving at guidelines which were conceptually applicable and agreeable to all fields in vocational education.

The following are the basic guidelines on articulation which were agreed upon.

I. ARTICULATION GUIDELINES

1. Support the general concept of course equivalency but refer for further study the review and choice of a model or models for course equivalency in vocational education. All campuses will strive seriously toward uniform course numbering for courses with equivalency in content.

2. Support the concept of a performance objective oriented approach to vocational education. (Agreement on the development of uniform performance objectives, provided that levels of attainment can be an individual campus decision.)

3. Support and review evaluative instruments developed cooperatively by instructors from the community colleges and the D.O.E. (Agreement on need for criterion testing.)

4. Initiate action to include participation of instructors from the secondary level and, where possible, other community colleges on each community college's vocational-technical advisory committee(s).

5. Request that vocational education inservice training opportunities through workshops or courses be held at times, such as summer, which are flexible enough to accommodate the needs of both Oahu and neighbor island instructors.

II. AREAS OF RESPONSIBILITY

The following were agreed to as appropirate areas of responsibility for the Provosts, the Chancellor for Community Colleges, the State Director for Vocational Education, and the State Board for Vocational Education.

Provosts:
1. Commitment to improving articulation between program areas
2. Consideration of course numbering matters
3. Development of performance objectives
4. Additions to membership on college advisory committees
5. Strengthening vocational guidance and counseling

Chancellor for Community Colleges:
1. Systemwide coordination of inservice training, especially with reference to dates, number of credits, workshops or courses offered.
2. Systemwide coordination of efforts to improve horizontal articulation.
3. Transmittal of information on implementation of recommendations on community college level to the Superintendent of Education for dissemination through established channels.

State Director for Vocational Education: Coordination of community college efforts to articulate vertically with the Department of Education.

State Board for Vocational Education:
1. Commitment to the concept and intent of articulation.
2. Establishment of position counts in (a) the Office of the Chancellor for Community Colleges for horizontal articulation, (b) the Office of the State Director for Vocational Education for vertical articulation.

III. TIME FRAMES FOR IMPLEMENTATION

No single time frame can be applied to all community colleges, as implementation is dependent on budgetary factors. Provosts will consult with their fiscal officers on the possibility of implementation through (1) state general funds as a campus budget item, and (2) federal vocational education funds, through the Office of the State Director for Vocational Education.

IV. FOLLOW-UP TO THIS MEETING

1. The recommendations from the second and third Articulation Institutes will be examined by Minnie Boggs to see how they fit in with the general guidelines accepted. Those recommendations not covered by these general guidelines will be reviewed at another meeting.

2. The Articulation Guidelines and delineation of areas of responsibility will be forwarded to Walter Chun, Director of Community College Services, for official action by the Council of Provosts. The Council will forward recommendations to the State Board for Vocational Education for further action on items which are beyond the provosts' domain.

3. The Council of Provosts will be responsible for establishing an alternative means of coordinating horizontal and vertical articulation efforts in the event that the recommended positions in the Office of the Chancellor for Community Colleges and the State Director for Vocational Education are not established.

4. As an individual campus responsibility, provosts will initiate action towards the development of a performance objective oriented approach to vocational education.

5. The Office of the Chancellor for Community Colleges will coordinate the beginning of implementation efforts to develop a model or models for performance objectives on individual campuses.

ADMINISTRATORS' MEETING ON ARTICULATION
REPORT - DEPARTMENT OF EDUCATION SESSION

I. General Recommendations

1. State Board for Vocational Education: Formally endorse the concept and intent of articulation.

   a. Group recommended approval and implementation by the State Board.

   b. Time schedule: As soon as possible.

2. State Board for Vocational Education: Establish a position in the State Director's office to evaluate programs including articulation.

   a. Group recommended approval but that the State Board should give priority to the restoration of positions of Asst. State Director and fiscal officer to the State Director's staff, with consideration being given to the assignment of evaluation and articulation responsibilities to the Asst. State Director rather than establishing a new position.

   b. Time schedule: July 1, 1975

3. Counselors: Acquire and apply knowledge of vocational education programs towards an articulated vocational counseling and guidance system.

   Group recommended approval with the following additional considerations:

   a. That an explicit statement of commitment to an articulated vocational counseling and guidance system including knowledge of vocational education programs be incorporated in the State Master Plan for Comprehensive Guidance.

   b. That the Office of the State Director should continue to make concerted efforts to provide information on the availability of resources (such as through the Career Information Center).

   c. That to the extent that attendance at workshops to enable counselors to acquire such knowledge is voluntary, district superintendents should encourage counselors to participate.

II. Specific Recommendation - Business Education (Typing and Shorthand)

Combine pts. 1 and 2 on agenda to read as follows:

Department of Education: Implement the recommended certification procedures for typing and shorthand Statewide and provide uniform certificates of proficiency to be used in certification procedures throughout the State. (By "Department of Education" is meant the State office through the Voc.-Tech. section.)

Time schedule: September, 1975

III. Recommendations for all Subject Areas

(Note: the group reorganized agenda items because it was felt certain problems were common to all subject areas and should be considered as a whole.)

1. Inservice Education

a. Funding - Responsible Agent: State Director for Vocational Education
It was recognized that the funding needed to come from the State Director.

b. Scheduling - Responsible Agents: District Superintendents in consultation with the State Personnel Office.
Scheduling covers both the calendar as well as the location of in-service classes.

c. Procedures - Responsible Agents: District Superintendents in consultation with the State Personnel Office.
Matters involving credit, cost, etc.

d. Participation - Responsible Agents: District Superintendents and individual instructors.
Participation is voluntary but District Superintendents will encourage participation.

e. Plan - Responsible Agents: DOE State Vocational-Technical Education Section, U.H. Chancellor for Community Colleges.
Recommendation is for a coordinated annual and long-range in-service education plan to be worked out with the U.H. Community Colleges.

f. Priority - Responsible Agents: DOE State Vocational-Technical Education Section with District Superintendents.

Time schedule: As soon as possible.

2. Competency Criteria

(Note: The following assumes horizontal articulation which needs to be completed at the community college level.)

a. Levels of Proficiency - Responsible Agents: Community College provosts and D.O.E. specialists. Provosts should initiate meetings to include community college and secondary school instructors working jointly.

b. Development of Measurements (same as above)

c. Setting of Minimum Standards (same as above)

d. Procedures in consultation with District Superintendents and DOE State office.

e. Certification - DOE State office
It was recognized that certification may not lend itself to every subject area. A specific recommendation in Auto Mechanics was that Honolulu Community College be designated to take the initiative.

Time schedule: As soon as possible with first priority to Auto Mechanics since groundwork for cooperation is already existing.

IV. Miscellaneous

1. Horizontal articulation has first priority.

2. Group did not establish priority among subject areas indicating that this should be a responsibility of the DOE State Voc.-Tech. section.

3. Review process is already in existence for DOE through District Superintendents.

4. No permanent implementation mechanism was recommended due to lack of time to discuss alternatives.

Office of the State Director for
Vocational Education
Special Federal Programs Project

TRAINING WORKSHOP, DEC. 19-20, 1975

Friday, Dec. 19		
8:30 - 11:00 a.m.	Opening Remarks	Samson Shigetomi
	Introduction Objective Product Process Timeline	Minnie Boggs
	Curriculum Development Based on Task Analysis & Content Validation/ Explication of General Concepts & Content of Ed CI 588B	Lawrence Inaba
	General Discussion Questions, suggestions, modifications, clarification designed to produce a common understanding of what each leader will work on and produce by June 1976.	
11:00 - 12:00 noon	Mid-America Vocational Curriculum Consortium's Format for Curriculum Development	Ann Benson Exec. Director
12:00 - 1:00 p.m.	Lunch (on your own)	
1:00 - 4:30 p.m.	Training continued	Ann Benson
Saturday, Dec. 20		
8:30 - 12:00 noon	Training	
12:00 - 1:00 p.m.	Lunch (on your own)	
1:00 - 3:00 or as needed	Training	

TRAINING WORKSHOP SESSIONS WILL BE HELD AT THE CAMPUS CENTER ROOM 310,
UNIVERSITY OF HAWAII, MANOA

GEORGE R. ARIYOSHI
GOVERNOR

TEICHIRO HIRATA
SUPERINTENDENT

STATE OF HAWAII
DEPARTMENT OF EDUCATION
P. O. BOX 2360
HONOLULU, HAWAII 96804

OFFICE OF THE SUPERINTENDENT

September 2, 1975

MEMO TO: District Superintendents, Secondary School Principals, and Business Education Teachers

F R O M: Albert H. Miyasato, Deputy Superintendent of Education

SUBJECT: Certificate for Achievement of Minimum Criteria in Secondary Vocational Education Programs

As many of you know, in the interest of enabling our students to achieve their career objectives without unnecessary delay through duplication of instruction as they progress from high school to community college, articulation institutes have been conducted since 1972-73.

One of the program areas which was reviewed by the secondary and community college instructors at the articulation institute was the Business Education program. Recommendation made by that group in 1973 was to certify students who successfully complete the requirements in typewriting and shorthand at the secondary school level.

Minimum certification criteria for typewriting levels I and II and shorthand levels I and II were agreed upon by both the secondary and community college instructors. Detailed specifications for the certification criteria are provided for your information and reference in the attached appendix.

The certification procedure, as recommended and approved for implementation, is as follows:

> The secondary school typewriting or shorthand teacher will certify a student who qualifies and will award him/her a wallet-sized certificate. Upon presentation of this certificate, the student may be enrolled in the next higher level course at the community college. Upon successful completion of the higher level course at the community college and upon application, the student may be granted credits for the lower level course for which he was certified.
>
> The final decision as to the level of placement will be determined by the community colleges, if any questions should arise as to the validity of the certificate because of time lapse between certification and community college matriculation.

As recommendations are adopted for other program areas, this certificate may be used to certify achievement of minimum criteria in those programs.

The current option to challenge a course (credit by examination) will continue to be available to students.

Wallet-sized certificates have been printed, as recommended and approved for implementation, and are being sent to all the secondary schools.

If there are any questions, please call the program specialists at 548-6314 or 548-6359 or write to Vocational-Technical Section, 1270 Queen Emma Street, Room 906, Honolulu, Hawaii 96813.

Attachment

cc: Dr. Philip K. Ige

(To be made one and ten copies)

HOUSE OF REPRESENTATIVES
EIGHTH LEGISLATURE, 1975
STATE OF HAWAII

Note: This resolution was not passed.

H.R. NO. 90

HOUSE RESOLUTION

REQUESTING THE PROVOSTS OF THE UNIVERSITY OF HAWAII COMMUNITY COLLEGES AND THE STATE DIRECTOR OF VOCATIONAL EDUCATION TO ENSURE GREATER COORDINATION AND EFFICIENCY IN THE ESTABLISHMENT AND DELIVERY OF RELEVANT VOCATIONAL EDUCATIONAL COURSE OFFERINGS AND TO IMPROVE ARTICULATION WITH THE DEPARTMENT OF EDUCATION.

WHEREAS, the revamping of vocational-technical education programs within the community colleges appears to be a slow and uneven process; and

WHEREAS, while the department of education is moving toward a uniform course content in its programs for vocational-technical education, such programs at the community college level appear to be lacking in standardization and coordination; and

WHEREAS, the community colleges seem unable to react in an effective and unified manner as can the department of education in responding to today's need for relevant and adequate course offerings; and

WHEREAS, the deficiency in performance at the community college level may be due in large part to the highly autonomous nature of the community colleges; and

WHEREAS, the pressing need for an effective, efficient, and relevant vocational-technical education program at the post-secondary level has become clearly evident; now, therefore,

BE IT RESOLVED by the House of Representatives of the Eighth Legislature of the State of Hawaii, Regular Session of 1975, that the community colleges in cooperation with the state director of vocational education are requested to:

- Establish guidelines for vocational-technical programs with common goals and objectives to which every campus must conform;
- Standardize vocational-technical course content to the greatest extent possible;

- Review vocational-technical educational programs in conjunction with manpower projections and employment needs, and where realistic employment opportunities do not exist, to suspend or terminate obsolete and nonviable programs;

- Ensure as many vocational-technical course options as possible including the consideration and development of a modular system of instruction; and

- Ensure that all vocational-technical programs in the post-secondary level are articulated with the department of education's secondary level offerings;

and

BE IT FURTHER RESOLVED that the community colleges with the provosts of each shall cooperate with the state director of vocational education to accomplish the aforementioned objectives in order to achieve greater efficiency within the present budget allocations and shall establish in cooperation with the department of education, a coordinated approach encompassing both secondary and post-secondary level programs; and

BE IT FURTHER RESOLVED that the University of Hawaii and the Department of Education shall submit a joint report of the progress made in achieving the purposes expressed in this Resolution at least twenty days prior to the convening of the 1976 Regular Session; and

BE IT FURTHER RESOLVED that certified copies of this Resolution be transmitted to the Chairman of the Board of Regents of the University of Hawaii, the President of the University of Hawaii, the Superintendent of Education, and the Governor of the State of Hawaii.

OFFERED BY:

JAN 21 1975

116

H.R. NO. 90

JAN 21 1975

UNIVERSITY OF HAWAII

Curriculum and Instruction - College of Education

November 26, 1975 CORRECTION TO SPECIAL ANNOUNCEMENT Please Post

Spring, 1976

Courses for Vocational Education Instructors

Ed CI 588B CURRICULUM DEVELOPMENT BASED ON JOB TASK ANALYSIS (2 credits)
Designed for inservice vocational education instructors. Focus on job task analysis-based curriculum development and content validation of curriculum.

Ed CI 587B CURRICULUM DEVELOPMENT: SEMINAR ON DEVELOPMENT OF COMMON COMMUNITY COLLEGE PROGRAM LEVEL PERFORMANCE OBJECTIVES (1 credit)
This 2-day seminar on April 14-15 in Honolulu will follow through a coursework in Ed CI 588B. However, Ed CI 588B is not a prerequisite for this course. Participants will develop common program level performance objectives for the community colleges in 15 areas:

Automotive Mechanics
Accounting
Agriculture
Auto Body Repair & Painting
Carpentry
Data Processing
Distributive Education
Drafting
Electricity
Electronics
Food Service
Nursing
Office Practice
Shorthand
Typing

Air fare and per diem will be provided for neighbor islanders. No other allowances will be provided.

Priority will be given to representatives from the 15 articulation areas listed above as coursework will be done in subject area groups. However, instructors from other subject areas will be accommodated on a space available basis but without transportation or subsistence allowances.

NOTE: Participation in developing common program level performance objectives may be on a non-credit basis. Please mark NON-CREDIT on the application form.

Ed CI 588B:

Location	Day/Date	Time	Instructor
Maui Community College	Saturdays, Jan. 17 - Feb. 14	8 a.m.-3 p.m.	Norman Harris
Hawaii Community College	Dec. 26-31, Jan. 3 Last 3-hr. meeting to be scheduled for early February	8 a.m.-12:30 p.m.	John Rantala
Honolulu Community College (Location of course for Oahu vocational education instructors)	Saturdays Jan. 3 - Feb. 14	8 a.m.-12:30 p.m.	Lawrence Inaba

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Ed CI 587B (1 credit, 2-day seminar):

Kapiolani Community College	April 14-15	8:30 a.m.-4:30 p.m.	Lawrence Inaba

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For further information, please call or write: Minnie Boggs
Special Federal Program Project
Office of the State Director for
Vocational Education
1776 University Ave., Wist 216
Hon., HI 96822 Ph: 948-8344

Applications must be received at the above address no later than December 17, 1975.

There will be a $10 registration fee to be paid by check (made out to University of Hawaii) on the first day of class.

STATE OF HAWAII

DEPARTMENT OF EDUCATION
P.O. BOX 2360
HONOLULU, HAWAII 96804

OFFICE OF INSTRUCTIONAL SERVICES

GENERAL EDUCATION
BRANCH

October 3, 1975

TO ALL CONSTRUCTION TEACHERS

As a follow-up of our articulation meeting, Sueo Kawakami and Harvey Chun of the Honolulu Community College have both worked very hard to finish the course outlines for the new proposed Carpentry programs that were agreed upon by the group. I am providing you with the draft copy so that you will have a chance to react to the drafts of the proposed courses.

Please review the copies and suggest any changes that you may feel is necessary. Because Honolulu Community College is anxious to process the courses through the appropriate channels please review the documents as soon as possible so that they may consider your suggested changes if any.

Thank you for your cooperation.

Aloha,

LAWRENCE A. INABA, Program Specialist
Industrial Technical Education

ei

Please return this along with your comments (if any) by October 24, 1975 to:

Mr. Sueo Kawakami
Carpentry Shop
Honolulu Community College
874 Dillingham Blvd.
Honolulu, Hawaii 96817

☐ I am satisfied with the proposed courses.

☐ I have made some suggestions. See attached comments.

122

93 Signed _____

CARPENTRY ADVISORY COMMITTEE MEETING AGENDA

DATE: November 20, 1975, Thursday

TIME: 6:00 p.m. - Dinner Meeting

PLACE: Yong Sing Restaurant
(Alakea Street)

Introduction ..... Sueo Kawakami

Purpose of the Advisory Committee ..... Alan Yonan

Organization of Committee
- Chairman
- Secretary

Presentation of Present Carpentry Program ..... Sueo Kawakami

Presentation of Proposed Carpentry Program ..... Harvey Chun

Tie in of High Schools' and Community Colleges' Programs ..... Dr. Lawrence Inaba

Discussion and Reaction to the Proposed Carpentry Program

Communication and Interaction among the Industry, Union, and the College
1. How they can help us
2. How the college can help them

Future Meeting Date

Adjournment

UNIVERSITY OF HAWAII

LEEWARD COMMUNITY COLLEGE

September 15, 1975

MEMO TO: Earl Ramsey, CADC

FROM : Ron Palma, Chairman
Business Education Division

SUBJECT: Course Equivalencies and Changes in Titles/Descriptions

A statewide articulation workshop on vocational education was held during the period beginning November, 1974 and ending with March, 1975. One of the areas in which agreement was reached by the community college representatives present was course equivalencies, course titles and course descriptions in Distributive Education. Although Leeward Community College does not now have a formal program in Distributive Education, we offer some of the courses contained in the basic core of a Distributive Education curriculum and are currently developing a Distributive Education option within our current management program.

As Leeward's representative at the above workshop I submitted the following list of course equivalencies, descriptions and title changes to our Business Division and they approved them as valid. I am now proposing that the CADC approve the attached list and forward it to the Faculty Senate and Provost with a recommendation that this information be communicated in writing to the Dean of Educational Services and that said Dean communicate in writing these items to the Dean of Students, Registrar and all guidance counselors in time for Spring registration. The ultimate goal is to have all of the title and description changes included in the Fall, 1976 catalog.

The primary student benefit of the proposal is to minimize potential lateral transfer problems for students within the state community college system in the area of Distributive Education. An additional benefit is to provide models for community colleges within the system who are planning to add such courses.

I understand that the CADC forms are undergoing a revision and since the old form does not provide for this type of proposal, I hope this format will suffice for processing these changes.

RP:da

Att.

124

96-045 Ala Ike · Pear. City, Hawaii 96782 /Cable Address: UNIHAW

An Equal Opportunity/Affirmative Action Employer

LIST OF EQUIVALENCIES BASED ON CURRENT CATALOGS

COLLEGE	COURSE NO.	TITLE
Maui CC	BUS 20	Introduction to Business
LEEWARD CC	BUS 21	Introduction to Business
Hawaii CC	GBUS 20	Basic Business Concepts*
Kauai CC	BUS 14B)	Business Environment*
	BUS 14C)	Functions of Business*
Kapiolani CC	GBUS 21	Introduction to Business

*to become "Introduction to Business" by Fall, 1976.

Maui CC	BUS 43	Salesmanship*
LEEWARD CC	BUS 24	Salesmanship*
Hawaii CC	MERCH 31	Salesmanship*
Kauai CC	BUS 15C	Personal Selling
Kapiolani CC	MERCH 21	Principles & Methods of Selling*

*to become "Personal Selling" by Fall, 1976

Maui CC	BUS 23	Business Mathematics
LEEWARD CC	BUS 23	Business Mathematics
Kauai CC	BUS 13B	Math of Finance*
	BUS 13C	Math of Merchandising*
	BUS 13D	Math of Accounting*
Kapiolani CC	GEN BUS 25	Applied Math*

*to become "Business Mathematics" by Fall, 1976

Maui CC	BUS 49	Supervision & Human Relations in Business*
LEEWARD CC	MGMT 21	Introduction to Management*
Kapiolani CC	GEN BUS 30	Principles of Management*

*to become "Supervisory Management" by Fall, 1976

LEEWARD CC	MGMT 22	Human Relations in Management*
Kauai CC	BUS 30	Human Relations in Business
Hawaii CC	GEN BUS 21	Human Relations in the World of Work*
Kapiolani CC	GEN BUS 23	Human Relations in Business

*to become "Human Relations in Business" by Fall, 1976

LIST OF EQUIVALENCIES BASED ON CURRENT CATALOGS

COLLEGE	COURSE NO.	TITLE
Maui CC	BUS 44	Marketing
LEEWARD CC	BUS 30	Principles of Marketing*
Hawaii CC	MERCH 47	Research & Decision Making for Marketing & Management*
Kauai CC	BUS 18B	Determining Target Marketing*
	BUS 18C	Developing Marketing Mix*
Kapiolani CC	MERCH 31	Principles of Marketing*

*to become "Marketing" by Fall, 1976.

Revised Course Descriptions:

BUS 30 Marketing: An introduction to Marketing principles including: channels of distribution; pricing; government regulations; consumer behavior; marketing functions and organization; product analysis; and promotional activity. Recommended preparation: Management 21, Accounting 201 or 20 and 21, and Economics 151. (Requirement for A.S. Degree in Management.)

MGMT 22 Human Relations in Business: How to deal more effectively with supervisory problems in areas such as motivation, communication skills, discipline, leadership, resistance to change, and labor relations.

UNIVERSITY OF HAWAII · KAUAI COMMUNITY COLLEGE

August 4, 1975

MEMORANDUM

TO: Mrs. Dorothy Kohashi

FROM: Minoru Shimokawa

SUBJECT: Implementation of Articulation Recommendations

The Kauai Community College Auto Body Department will be adopting most of the Performance Objectives as developed by the CURRICULUM AND INSTRUCTIONAL MATERIALS CENTER at Stillwater, Oklahoma.

All of the Auto Body Departments throughout the system should review this document so that some form of standardization can be realized and also instructors should incorporate ideas of their own within this document.

The following Performance Objectives for the Kauai Community College Auto Body Program is to be distributed to all Auto Body instructors within the system.

AB 020 FENDER REPAIR (Fall Semester, First Year Student)

GENERAL SAFETY

Terminal Objective

After completion of this unit, the student should be able to recognize unsafe situations and be able to state rules for shop and personal safety. He should be able to select the correct fire extinguisher for the classes of fire and match the safety color code with statements of its use. The student should be willing to sign the safety pledge form and should make at least one hundred percent on the unit test.

Specific Objectives

1. Define the terms safety, accident, and first aid.
2. Match the six colors of the safety color code with statements of their use.
3. List five rules for personal safety.
4. List eight rules for general shop safety.
5. List five methods used to maintain a clean and orderly shop.
6. Match the four classes of fire with statements defining each class.
7. List the three components of the fire triangle.

AN EQUAL OPPORTUNITY EMPLOYER
RR 1, Box 216, Lihue, Hawaii 96766 / Telephone 245-6741

Date: 2/26/75

To: George Seriguchi

From: Student Services

RE: Discussion to implement articulation agreements with Maui County High Schools in the Auto Mechanics Program in granting credits for equivalent courses taken in high school.

(Participants--George Seriguchi, Clyde Sakamoto, Stephen Kameda, Lillian Kobayashi)

AGREEMENTS:

1. Award MCC credits in AMT 49 (4 credits) AUTOMOTIVE SERVICING, to any student who enrolls at MCC who has completed one year of an automotive course at Lahainaluna, Baldwin or Maui High Schools, or any other high school or post-secondary school with a grade of "C" or better.

2. Any student who has prior experience or training (high school or otherwise) who feels he has sufficient knowledge or background in any of the AMT components offered at MCC, may challenge a course for credit. The procedure is for the student to apply for credit by examination by discussin his intent with the MCC Automotive instructor and securing permission to challenge the course. Application forms for this purpose are available in the Student Services Office. See a counselor.

3. A student who completes two years of automotive courses at Lahainaluna with a grade of "B" or better as his second year final grade will be awarded MCC credits for:

	AMT 53 (3 credits)	AUTOMOTIVE BRAKE SYSTEM
and	AMT 52 (4 credits)	ENGINE

Possibility of awarding credits for AMT 54 (4 credits) AUTOMOTIVE POWER TRANSMISSION, will be explored further by George Seriguchi with Frank Martin, Lahainaluna High School Auto Mechanics Instructor.

LK

cc: Sanae Moikeha, Provost
Harold Luntey, Dean of Instruction
Wallace Matsuda, Interim Voc-Tech Chairman

JOINT ACTIVITIES BETWEEN THE DEPARTMENT OF EDUCATION AND
KAUAI COMMUNITY COLLEGE

1. Advanced placement in courses offered both on the high school and the college level by use of certificate of proficiency.

Current semester:	Waimea High School	4
	Kapaa High School	2
	Kauai High School	4
	TOTAL	10

2. Articulation.

   Similar levels of proficiency in similar courses, e.g. typing and shorthand, effectuated through meetings among the faculty members in the same disciplines at the high schools and at the College.

3. State-wide articulation meetings between Department of Education and Community College faculty and administrators.

   Fields covered:
   - agriculture
   - architectural drafting
   - auto body and repair
   - carpentry technology
   - distributive education

4. Summer exemplary program, Orientation to Occupational Education, supported by vocational education funds.

   First two weeks of session -- drafting and welding
   Second two weeks of session -- auto body repair and carpentry
   Third two weeks of session -- auto mechanics and machine shop

5. Early admission of high school seniors.

   Approximately 57 students for the fall semester.

6. Department of Education personnel serving on advisory committees.

   All-College Advisory Committee: District Superintendent--ex-officio member.
   Advisory committees in the trades: agriculture, auto body repair and painting, automotive mechanics technology, business education, carpentry, drafting technology, and welding. Each committee has a high school representative totaling: Waimea High School--3, Kapaa High School--1, and Kauai High School--5.
   Community Services Advisory Committee: Two representatives from Kauai High School.

7. In-service courses for teachers.

   The College of Continuing Education and Community Services.
   Appropriate courses at Kauai Community College.

8. Use of Department of Education facilities for evening courses.

   Academic year 1974-75 at Waimea High School, Kapaa High School, and Koloa School, counting both semesters together: 9 classrooms.

9. Occasional use of Kauai High School gymnasium for inter-scholastic athletics: basketball and volleyball.

10. School survey.

    1975 DOE Senior Survey of Graduate Plans
    Agriculture Survey

11. Bi-lingual - bi-cultural training program.

    Eight students at the College.